



*Honoring the Past
Transforming our Future*

GRAND RAPIDS FIRE DEPARTMENT ANNUAL REPORT 2010

GRFD at a Glance....

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Fiscal Summary

FY 2010 City Budget = \$287,750,395

FY 2010 City General Fund = \$105,254,831

FY 2010 GRFD Adopted Budget = \$24,862,624

Personnel Summary

235 = Total Authorized Strength (staffing)

215 = Operations Division Personnel with 12 vacancies (91.9%)

11 = Administrative and Training Personnel (4.3%)

9 = Prevention Bureau Personnel (3.8%)

Emergency Operations Summary

25,090 = Apparatus Responses

19,634 = Emergency Incidents (All Types)

12,601 = Emergency Medical Service Incidents

2,270 = Fires and Fire Alarms

689 = Fires Extinguished

97.28% = Property Saved Rate

\$347,275,637.16 = Property Saved Value

2.72% = Property Lost Rate

\$9,443,315.32 = Property Lost Value

25 = Civilian Injuries

0 = Civilian Deaths

54 = Firefighter Injuries* (updated)

0 = Firefighter Deaths

Mission & Values

Mission

To provide the highest level of service to our community by:

- Valuing our members
- Promoting positive leadership
- A commitment to excellence

Vision

To remain a highly professional and caring team by means of:

- Ongoing training
- Quality equipment
- Effective communication networks

And to deliver high quality

- Fire prevention and education
- Firefighting and rescue service
- Emergency medical care

Goals

- Attract and maintain a safe, healthy, well trained and high performing workforce
- Deliver comprehensive safety services
- Exceed our customer's expectations

Management Philosophy

The management team of the GRFD has adopted a philosophy that will guide it through the execution of its responsibilities. In pursuing internal and external organization goals and objectives, we have identified the following traits to be used:

- | | | |
|----------------|------------------|--------------|
| ◆ Transparency | ◆ Sustainability | ◆ Honesty |
| ◆ Integrity | ◆ Consistency | ◆ Commitment |

A message from the Fire Chief



It is my honor to present the Grand Rapids Fire Department's 2010 Annual Report that summarizes our activities over the past year. Our department continues to face significant challenges during this time period, while operating in the professional and caring manner that our customers have come to expect. There were also a number of triumphs in 2010 due to our dedicated personnel, and I am proud to lead this multi-faceted organization which provides a wide array of essential life safety and emergency management services to those who live and work in the Grand Rapids metropolitan area. As with most service based organizations, the brave men and women of the GRFD are the heart and soul of this organization, using their training, skills and internal fortitude to deal with any situation that may arise.

2010 presented several unique challenges that have not been faced in decades, including the 2009 December layoffs and demotions of personnel due to the dire fiscal climate in our city. Even in the face of these changes to our service delivery abilities, every member of this department without exception has shown their unwavering commitment for the safety of this community, by continuing to deliver the highest level of service possible to those we serve.

In May we held the first Public Safety Expo to celebrate who we are, what we do and to educate the public about the services we provide. It was a great success due to the collaboration of Administration, the Firefighters Union, and all of the volunteers who played important roles. We are looking forward to holding our second expo in May of 2011, making this an annual event.

We were fortunate to be awarded a 2009 SAFER grant for 17 firefighter positions and the passing of the City Income Tax increase by the citizens of the City of Grand Rapids. This income tax increase made it possible to hire an additional 15 firefighter positions. Because of these successes we were able to place Rescue Company 7 and Medical Squad 7 in service at our LaGrave Avenue Fire Station. We were also able to place Engine 4 back in service at our Kalamazoo Avenue Fire Station which increased our concentration on the Southeast side of the city.

Due to our talented team of grant writers, we were able to acquire \$3,504,753 in grant funding to help subsidize our personnel and equipment needs for 2010. We will constantly pursue every grant opportunity that is available and hope to be continually successful. By looking to alternative funding sources, we were able to maintain our core services to the city with minimal impact to our budget.

2010 has brought the start of many initiatives that will have great impact on our organization. The consolidation of all Kent County Dispatch Centers and 911 Public Safety Answering Points (PSAP's) into two (2) communication centers was initiated. Along with this consolidation is the acquisition of new Computer Aided Dispatch (CAD) software. The provisioning began in 2010, with a "GO LIVE" date of June 21, 2011. This will result in more efficient, effective, and collaborative communication centers that will improve overall customer service when responding to emergencies, thus improving our overall outcomes.

As a department, we are upgrading our Records Management System (RMS) to FireHouse reporting software. This software will allow us the ability to have a fully functional records management system for not only our incident reporting (NFIRS), but also for our training records, fire inspections, operational permits, as well as apparatus and fire station maintenance. We began provisioning in the fall of 2010 with implementation of the FireHouse modules in phases beginning in March of 2011.

Another significant undertaking was conducting a LEAN process on our payroll system. We found that between the demands of the City's payroll requirements and our contractual items that we had a very time consuming, redundant, and complicated payroll process. We currently use software called TeleStaff for our staffing purposes. The decision was made to fully utilize TeleStaff and its payroll module Time Card for all of our payroll documentation to maximize the efficiency of our payroll system. Time Card took the dedication of one individual over a six (6) month period, to fully provision and provide the training to our personnel in the new process. This is another exciting improvement in our internal processes, creating efficiencies and giving more time for our personnel to provide quality service to our customers.

Driven by the ongoing economic decline and the desire to continually provide a high level of service to our customers, the City Manager has directed all City departments to transform themselves and to become fiscally sustainable. In 2009 the Fire Department had already been investigating new technologies and consolidation of the fire service. We understand that the fire service of the future may not look like the fire service of today and we need to continue to be proactive and plan for that future. We are aggressively researching, developing, and determining how the fire service will transform to meet future needs and expectations. We believe through transformation we can become a sustainable fire and rescue service that will continue to provide a high level of service to our citizens, ensure the safety of our employees, and meet our desired outcomes.

Our small but effective fire prevention bureau was able to accomplish some great things in 2010 in terms of reaching our community through public education and inspections. Events such as Art Prize, Laugh Fest, and other activities were accomplished safely due to their efforts.

Suppression staffing improved due to the successful SAFER grant and Income Tax Ballot approval. Apparatus were strategically placed and staffed around the city to provide the

best coverage possible with the resources available to us. We were able to make significant improvements in our response performance measures in 2010. We will continue to analyze our performance levels and make positive changes with measurable outcomes.

We look forward to the future opportunities and challenges that 2011 may bring. Be assured that your Grand Rapids Fire Department will be a flexible and proactive community based organization, using strategic planning to align with our internal and external stakeholders as we continue to transform into the fire service of the future.

Laura Knapp
Fire Chief

2010 Organizational Chart

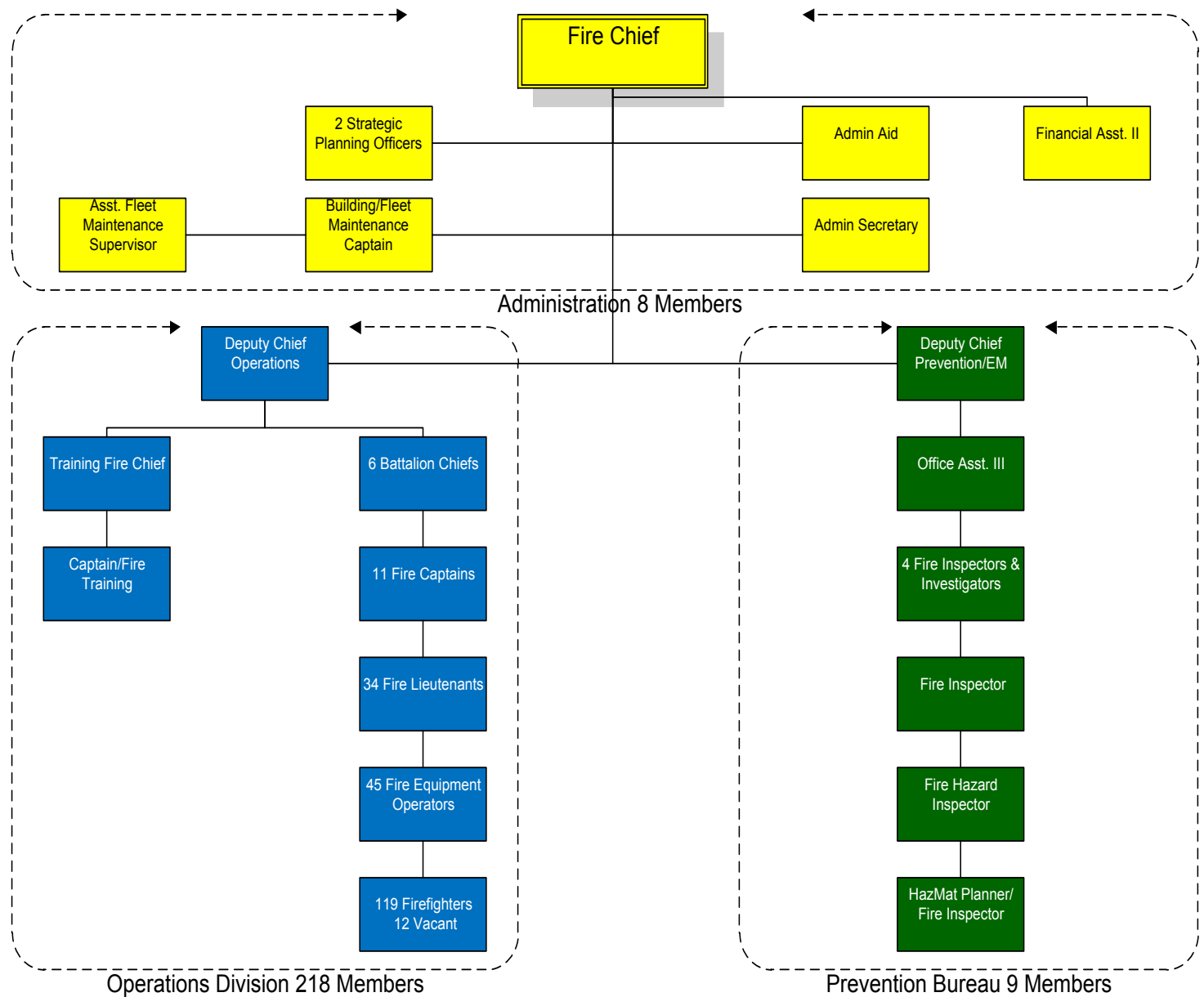


Grand Rapids
Fire Department

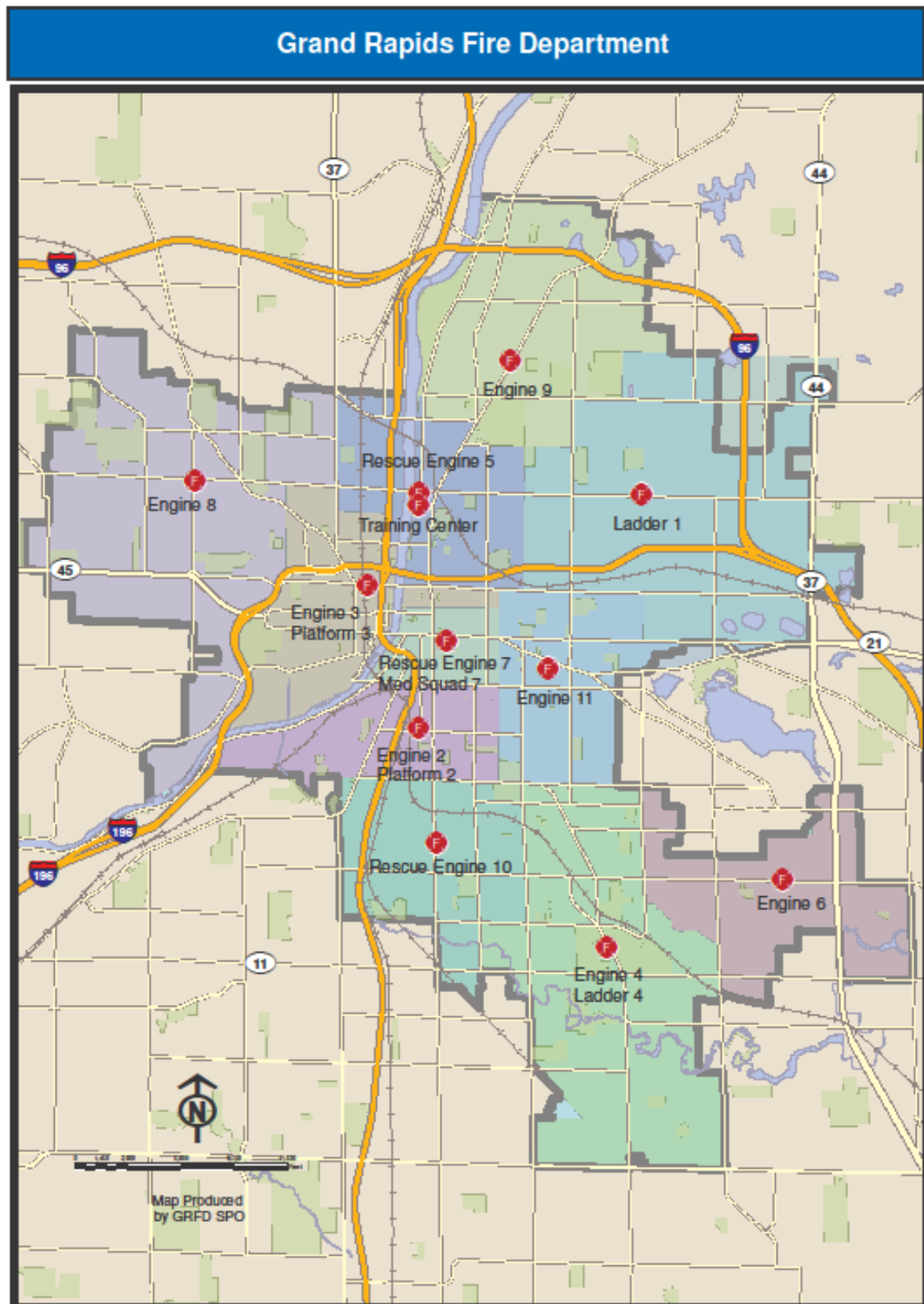


Organizational Chart

235 Total Authorized Personnel



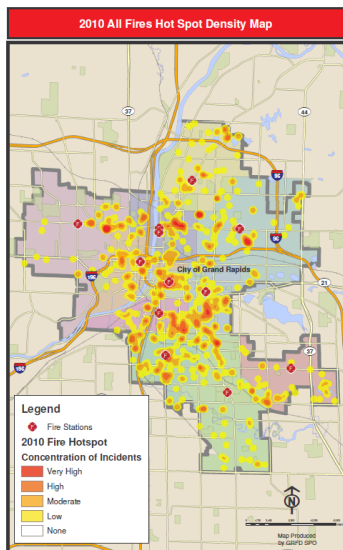
Jurisdictional Map



Administration

Strategic Planning Office

This past year for the Strategic Planning Office (SPO) has been extremely eventful in terms of productivity and change management. Implemented in 2009, the office has quickly become the information center for the organization. Although planning is always an important aspect of managing a modern fire department, the economic downturn has necessitated an enormous amount of operational and administrative process changes in a very compressed time frame.



Data tracking and presentation has continued to evolve with the utilization of FireView GIS software, which has greatly enhanced the ability of the GRFD to visually represent vital information at a granular level previously unattainable. Data driven decisions have been the backbone of positive change, and provide a clear explanation of expected outcomes based on our decisions to elected officials, department personnel and the citizens we serve.

Consolidation has consumed much of the SPO's focus during 2010, with frequent meetings, document creation and in depth statistical analyzation taking place. This detailed work has allowed the involved parties to continue moving forward with creating a new model of providing fire and rescue services to the citizens of West Michigan. Many positive outcomes have resulted from these regular meetings, and it is hopeful that 2011 will bring further progress. The SPO partnered with Kendall College of Art and Design to create a "draft" identity for the possible organization. Michelle Schultz is a Kendall graduate and was the sole designer for five possible patches.



The SPO is still aligning all functions of the organization with the requirements for Accreditation through the Center for Public Safety Excellence, with plans to submit all required documents in late 2011. The SPO has facilitated several strategic planning sessions for the command staff, administered a department wide survey and contacted numerous citizen groups for input into the strategic plan. This will become an important document that will help GRFD navigate the uncertain economic conditions, aligning ourselves with the recommendations of both internal and external stakeholders.

2010 brought with it many successes, including grant awards that purchased important equipment and rehired laid off firefighters, all of which hinged greatly on the ability of our department to justify the need and meet certain criteria in terms of reporting. Just a few short years ago, much of these requirements were out of reach for the GRFD, but with continual improvement in the areas of planning and data tracking, we are now able to clearly articulate our department's goals and desired outcomes, as well as the resources needed to obtain them. A City of Grand Rapids team award was presented to the SPO employees for their hard work and dedication to constant improvement through strategic planning by City Manager Greg Sundstrom.



In addition to fire department related activities, the SPO has become involved in many aspects throughout the community to effect positive change. Serving on the City's community service taskforce, representing the Grand Rapids local chapter of Hero for a Day, or attending various community functions, the GRFD has an emerging presence throughout our area.

CITY OF GRAND RAPIDS

CUSTOMER SERVICE STANDARDS



Preamble

We the employees of the City of Grand Rapids are committed to excellence in customer service. We are here for our customers and pride ourselves in customer satisfaction. Customers are the purpose of our work, not an interruption to it. Thus, we strive to deliver quality customer service through continuous improvement. This is accomplished through training, monitoring satisfaction, gauging performance and adjusting processes as necessary.

When Assisting You, We Will:

- Treat you with equality- in a friendly and professional manner.
- Identify ourselves on every occasion as a City employee and discuss the actions we are taking.
- Provide accurate explanations or give you a referral to the appropriate department(s).
- Seek your feedback to gauge our customer service performance.
- Ensure our programs, services and facilities are accessible.

When Face to Face, We Will:

- Deliver prompt, polite and personable recognition with a smile
- Be honest, attentive and listen to your needs and requests.
- Respect your schedule and strive to be on time for appointments and meetings.
- Be flexible while respecting established rules and procedures to meet your needs.

When You Contact Us, We Will:

- Greet you courteously and professionally.
- Contact you within one business day if we missed your attempt to reach us.
- Utilize your desired method of response whenever possible.



2011 Goals

- Become Accredited through CPSE
- Positively affect our ISO rating
- Test new methods of fire suppression technology
- Increase grant and fire prevention initiatives
- Increase community involvement
- Automate data reporting

Fiscal Services

The City of Grand Rapids and thus GRFD operates on a fiscal calendar that runs from July 1 to June 30. Calendar year 2010 is a combination of the second half of fiscal year 2010 (FY10) and the first half of fiscal year 2011 (FY11).

Fiscal year 2010 began in July 2009 with an adopted FY10 budget of \$24,862,624 in expenses and \$1,005,602 in revenue. The adopted FY10 budget had been cut drastically by \$1.3 million to approximately \$23,562,624 and the total authorized strength (TAS) had been cut from 230 to 203.

In April 2010, GRFD was awarded the 2009 SAFER in the amount of \$2,962,553, to be paid over two years. This grant allowed GRFD to hire/re-hire 17 firefighters and brought the TAS to 220. In May 2010, the citizens of Grand Rapids approved an income tax increase from 1.3% to 1.5% or roughly \$7.5 million. The income tax increase allocated hiring an additional 15 firefighters and elevated the TAS to 235.



FY10 ended with an actual general fund expenditure totaling \$22,050,841. Of that \$19,380,604 or 87.89% was directly attributed to personnel costs. Revenues received in FY10 were \$1,032,076, a 9.3% increase over FY09. FY11 began with an adopted budget of \$26,680,204 and estimated revenue of \$1,009,007. December 2010 closed with approximately 55% of the budget remaining or approximately \$14.8 million accessible for the second half of FY11.

During Calendar year 2010, GRFD was awarded 4 grants totaling \$3,616,253 in projects/personnel costs, including the 2009 SAFER grant. The grants amounted to \$3,504,753 in grant monies and \$111,500 in GRFD matching monies. In September 2010, GRFD applied for the 2010 SAFER grant in the amount of \$2,997,810 or 19 firefighter positions. The grant award is still pending.

Human Resources

The GRFD experienced a tremendous amount of activity in the area of Human Resources during 2010. The majority of human resources requirements came from situations that were previously foreign to the organization, including the recall of six laid-off firefighters and the hiring of seventeen new firefighters due to the successful awarding of a FEMA SAFER grant. In addition, the passage of an income tax ballot proposal necessitated an abbreviated hiring process to achieve the fulfillment of the citizen's wishes to maintain adequate fire suppression staffing levels.

The recalled firefighters were given reorientation training to assure that their skills were up to GRPD operational standards. The newly hired firefighters were required to have prerequisites of Firefighter I and II certification, as well as a medical first responder license. The new hires consisted of two separate training academies that received condensed training on department procedures and methods.

Due to the recall of the laid off personnel, twelve demoted individuals were reinstated to their former ranks, including four Lieutenants and eight Equipment Operators. Two promotions occurred in 2010, consisting of one Deputy Chief and one Battalion Chief. An Administrative Aid was hired to replace a retired staff member in the administrative offices and the position of Assistant Training Supervisor and two Strategic Planning Officer Positions were budgeted for and filled with personnel on long term acting assignments.

Three retirements occurred in 2010. Additionally, two individuals that left in previous years began to draw their pensions in 2010, making the official count for the 2010 pension system five retirees.

The total authorized strength of the fire department increased from 203 to 235 in 2010. There are currently 20 permanent staff assigned to Fire administration and the Training Division. The remainder of the departments authorized strength, 215 personnel, is assigned to Operations.

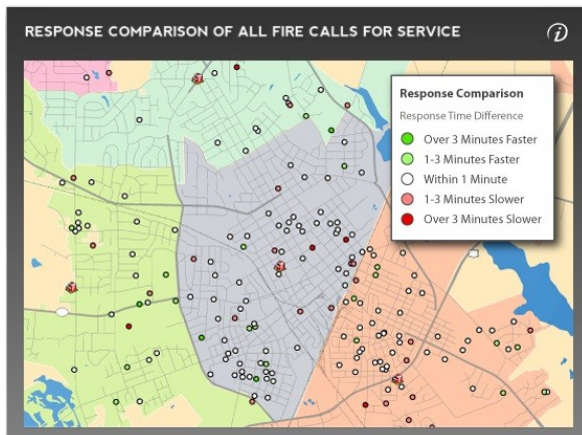
Information Technology

2010 proved to be another exciting year for Information Technology (IT), as we continued to work at increasing the efficiency and productivity of the personnel by using the latest technology. Many projects that started in 2009 saw completion in 2010, including implementation of an IT equipment replacement plan, wireless card testing for our apparatus and expansion of our internal SharePoint site. There are also many more on the horizon, such as fully implementing the new Record Management Software (RMS); Firehouse.

The expansion of SharePoint resulted in further access to more types of documents and increased access to collaboration sites, which has really increased the functionality of our portal space. Outdated radio modems were replaced inside all fire apparatus, as the aging system was unable to be supported in a fiscally responsible manner. This enhancement also ties directly to additional upgrades, as the department prepares for the future of the Motorola Computer Aided Dispatch (CAD) software. This change is a great stride toward being able to provide increased quality of information while en-route to an emergency incident. Many of the specifications such as Automatic Resource Location (ARL) will also speed the dispatching of the closest available unit based on incident type.



Wireless communications took another step forward as the city saw the launch of a high bandwidth Wi-Max connection come to life. With that, GRFD has begun testing the system which would provide GRFD with greater future flexibility and connectivity. The large effort to replace and understand the departments' phone systems not only internally, but with dispatch was undertaken and met with a complete replacement of the old system. This provides the department with a cost savings and newer, more capable equipment. The system is designed to add features in the future, further increasing communication with other inter-city departments. In keeping with one of the main themes of 2009, GRFD dove into further data collection and use. Expanding the use of current GIS systems allowed us to generate reports and maps with FireView, a GIS add-on, faster than ever before at the department level.



Given the magnitude of projects underway in 2010, the upcoming year will be filled with excitement, as many types of software and hardware will finally come to fruition. Motorola CAD and Firehouse reporting will be fully functioning in 2011 and bring together a culmination of years of hard work and testing, including an automatic resource location (ARL) feature in dispatch that will enable the closest units to be sent to the scene of an emergency. In addition to these major projects, video conferencing will be implemented utilizing Microsoft Live Meeting, enabling battalion or station meetings to be held online, eliminating the need to relocate equipment throughout the city. As always, the I.T. office of the GRFD will pursue technology wherever possible to increase efficiencies, decrease cost or make our personnel safer.

Maintenance

The Maintenance Division is responsible for the maintenance and repairs of 70 vehicles, 11 Fire Stations, and a training center. The fleet consists of a wide range of vehicles, with the front-line fleet consisting of pumpers or engines, medical squads, rescue engines, quints, and command vehicles. The fleet also has specialized vehicles that respond to a wide variety of more technical emergency incidents, with these additional units ranging in size from tractor trailers for operations such as Hazardous Materials responses, to boats for river rescue operations.

The Maintenance Division is also responsible for developing specifications for fleet apparatus and equipment, ensuring that the GRFD receives durable and cost effective apparatus, which are safe to operate. Implementation of programs to increase the lifespan of certain wear parts, such as having our brake pads cryogenically treated were started to further reduce long term costs. Planning is also complete to allow for future refurbishment of older engines and to transform older aerial platforms into quints, which will increase their capability, lengthen their lifespan and allow for an adequate supply of reserve apparatus.

The addition of a highway blocking vehicle is underway, which will be a unique addition to our fleet. This vehicle was previously used by the city's water department and will be outfitted with warning lights, radios, and a towed attenuator. The attenuator is designed to absorb energy in a crash. Citizen and responder safety is the primary concern, but it will also increase the safety of the equipment while responding to vehicular accidents in designated areas with high speed traffic. This specialty vehicle will hopefully keep further accidents to a minimum, as it is costly and time prohibitive to repair fire apparatus that are struck by other motorists.

The application of reflective chevron striping to the rear of all fire apparatus is a project started in FY2010. Grant funding was secured to allow this project. This chevron striping will increase apparatus visibility, safety and align the department's vehicles with National Fire Protection Association (NFPA) Standard 1901: Standard for Automotive Fire Apparatus. This project will be completed by May of 2011.



A variety of projects were completed in 2010 at several of the Fire Stations and Training Center. Offices and living areas at Bridge Station were upgraded to modern office layouts which allow for better use of our current technology requirements. There were two energy efficiency projects as part of the overall City's "green" initiative. The first project was to replace old single glazed windows and doors with energy-efficient double glazed glass. The second project was to replace old single glazed clerestory windows with an insulated wall panel. These two combined projects were in line with the City's Energy Efficiency and Conservation Strategy and have an average payback within 4 years. The projected annual savings are approximately \$3500 annually, in addition to decreased fossil fuel usage.

In 2011, four stations have lighting upgrades pending with the help of rebate programs through Consumers Energy. These upgrades are for the Burton, Covell, Kalamazoo, and Leonard Stations. The projected annual savings is \$3,300 in energy costs. Planning is complete to allow for these lighting upgrades at our four remaining Stations as the budget allows.

Fire Prevention



The Fire Prevention Bureau in 2010 provided code enforcement, fire investigation, plan review, hazardous materials planning and fire education for the public. Despite resource challenges, the bureau used hard work, determination and creativity to protect the safety and well being of all who visit, work, and reside in Grand Rapids.

Highlights for the fire prevention bureau this year include the “2009 Team of the Year” Employee Recognition Award presented in 2010 to the members of Fire Prevention, Fire Suppression, Fox 17 and Calvin College for a series of Public Safety Announcements about fire safety. Two fire prevention inspectors/investigators attended the National Fire Academy for training in fire modeling. The Fire Prevention Bureau remodeled the office space to facilitate efficiencies and improve the communication flow within the Bureau. The fire investigators worked collaboratively with local,

state, and federal agencies in the arrest of an individual suspected in a number of arson fires on the Southeast side of the City. Fire inspections occurred at several high profile buildings including; Spectrum Health’s Helen DeVos Children’s Hospital, Michigan State University’s Secchia Center and the UICA / Gallery on Fulton. The inspectors also ensured the safety of ArtPrize 2010 resulting in a safe and fun-filled event for all its visitors.

As we move forward in 2011, there will be new demands and higher expectations placed upon each member of the Fire Prevention Bureau. The dedicated staff of Fire Prevention will rise to the occasion with the utmost skill and professionalism, creatively utilizing all of the available resources to provide a fire-safe community.

Gary Szotko

Deputy Chief of Prevention
and Emergency Management

2010 FPBureau Inspection Summary

Inspection Type	Number	Hours
Assembly	312	409
Business	213	365
Educational	0	0.5
Factory/Industrial	31	38
Institutional	3	6
Residential	48	143
Mixed Use	13	24.5
New Construction	458	830
Special Events	224	527
Total	1302	2343

2010 FPB Educational/Technical Summary

Type	Number	Hours
Business License	62	83.3
Life Safety Certification	1990	435
Plan Review	185	193
Meetings	519	663
Public Education	57	115
Formal Training	49	354
Personal Development	519	373
Total	3381	2216.3

2010 FPB Investigation Summary

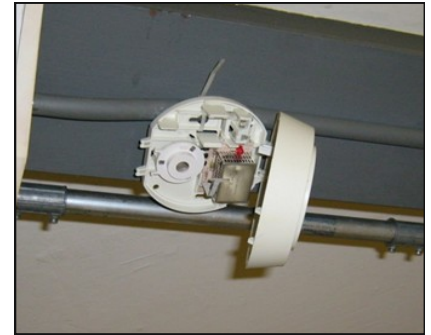
Type	Number	Hours
On Scene Investigation	81	530
Interviews	18	47
Court Preparation	16	103
Court Appearances	4	21
GRPD Liason	5	25
Training	3	195
Personal Development	20	105
Public Education	1	0.5
Meetings	21	34
Misc.	28	183
Reporting	54	900
After Hours Response	65	203
Total	316	2346.5

Fire Inspections

In 2010, among a wide range of tasks, Fire Prevention Inspectors were responsible for conducting Fire Prevention Inspections in businesses with hazardous operations, existing buildings under normal operation, and new construction projects including remodels of existing buildings. The overall objectives of these inspections are to educate the Grand Rapids community on the hazards associated with fire, promote compliance with the adopted fire codes in an effort to prevent fires, and minimize loss in the event a fire does originate.

Over the past year, the Fire Prevention Bureau was proud to contribute to the development of the City by serving as technical experts, consultants and inspectors of fire life safety components to system designers, contractors, and other city departments in various new construction projects. Overall, the greatest amount of Fire Prevention Bureau's inspection time was dedicated to new construction projects, which required approximately one-third of the total inspection time, spent in 2010. In 37% of new construction inspections, issues were identified that required modification and subsequent re-inspection.

Throughout 2010, there were several major construction initiatives that required a large amount of Fire Prevention Bureau involvement. These projects required significant coordination between the Fire Prevention Bureau, the Grand Rapids Building Officials and Inspectors, the State Fire Marshal's office, general contractors, building owners, and sprinkler and fire alarm designers and installers. These projects included the Michigan Hill medical buildings, such as the DeVos Children's Hospital, MSU's Secchia Center (Tower 15), Tower 35, The Gallery on West Fulton, Thirty-Eight (38 Commerce SE), River City Building, Kent County Correctional Facility remodel, and Meijer's (28th and Kalamazoo).



In addition to new construction projects and remodels, the Fire Prevention Bureau conducted inspections in existing businesses. When conducting inspections in existing buildings, Fire Prevention Inspectors work closely with business owners and representatives to bring the business into compliance with the 2003 International Fire Code. Bringing a business into compliance with the Fire Code can ensure the safety of both occupants and firefighters, as well as, facilitate a fire safe operation. In 2010, assemblies (restaurants, bars, nightclubs, et cetera) and residential high-rises created a high demand for inspectors, totaling approximately 32% of inspection time collectively. Much of this is attributed to the fact that a high percentage of fires start in kitchens, and residential occupancies are at the greatest risk of fire and loss of life.



The company fire prevention and education program continued in 2010 and has helped the Fire Prevention Bureau triage buildings that have serious fire hazards and code violations. After a fire company conducts a site visit and sends in the inspection report, it is reviewed by a fire inspector for outstanding fire hazards. If any issues are discovered, a fire inspector follows up with the business to bring the building to the appropriate level of safety.

On top of inspections that are generated internally, the fire prevention bureau conducted inspections as a result of business licensing/permitting from the City Clerk's Office, Liquor Licenses from GRPD's Vice Unit, Operational Permits, Fire Life Safety system inspection submittal program, external complaints, commercial building condition referrals, and housing inspection referrals.

Finally, throughout the year, the Fire Prevention Bureau has continually worked with new technology and computer software to streamline the inspection process and increase effectiveness. One of the larger projects that will continue into the year 2011 is the implementation of the Inspection Module within the new FireHouse software which is designed to increase documentation capabilities.

Plan Review

The Fire Prevention Bureau personnel provide a variety of services that can be gathered under the functional umbrella called “plan review.” Specifically, personnel perform automatic sprinkler and fire alarm installation plan reviews, site plan reviews, street repair and rebuild plan review for fire department access and fire hydrant placement, design team participation, pre-construction meetings with and code research for design professionals, builders, and contractors, and consultation with other City Departments with regard to Fire Code issues.



Fire Prevention Inspectors (FPIs) are all NFPA-certified to the Certified Fire Inspector-II (CFI-II) and Certified Plans Examiner (CPE) levels. Additionally, one FPI is an NFPA-Certified Fire Protection Specialist (CFPS). Each of these certifications requires earning continuing education credits, and GRFD FPIs were involved in personal development in the area of continuing education for approximately 356 personnel-hours in 2010.

Fire Prevention Bureau partners with the City’s Building, Electrical, and Mechanical Departments to provide technical expertise in the requirements of the International Fire Code as it relates to building construction, renovation, and remodeling. One venue for this is participating in pre-construction meetings with architects, engineers, designers, and contractors who are in the planning stages of building projects. The scope of these projects varies from single building or floor build-outs and remodels to campus-wide institutional developments. They all have in common a desire for developers and builders to avoid costly after-the-fact modifications by identifying potential code-related issues and solutions in the pre-planning stage. Bureau personnel participated in approximately 24 such meetings accounting for more than 50 hours.

Additionally within 2010, FPIs participated in approximately eighteen Design Team meetings. FPIs provided professional expertise to builders, contractors, architects, and engineers in regards to specific code questions. We also reviewed installation plans for approximately 201 automatic sprinkler and fire alarm systems to ensure compliance of fire protection systems with relevant Building and Fire Codes, as well as NFPA Standards; these reviews accounting for approximately 180 hours. Street construction and refurbishment plans were also reviewed on 33 street projects. Lastly, FPIs review building site plans for utility (water supply) issues, fire department access issues, architectural plans for egress, occupant load, and fire safety issues by assisting the Building Department plan reviewers on a weekly basis.

Public Education

In keeping with the internal goals set for 2010, the Fire Prevention Bureau focused a large amount of its efforts on building coalitions and partnerships with other organizations. These included building corporate partnerships interested in furthering the mission and goals of the GRFD by preventing predictable death and injury through education and prevention. Some of the corporate interactions occurring this past year were Consumers Energy, SMG, Blue Cross/ Blue Shield, Michigan Youth Challenge Academy, Safe Kids Advisory Council of DeVos Children’s Hospital, Amway Corporation and the Grand Rapids Job Corps. Through these innovative partnerships, we were able to reach many more people in the community than previously thought, and share the positive outcomes that resulted from this collaboration.



Due to the heightened use and interest of social media, the Fire Prevention Bureau is reaching out in different venues than ever before; marketing online in an attempt to cultivate social interaction about preventing predictable injuries. This is accomplished through managing accounts on Twitter, Facebook, YouTube, LinkedIn and using the department’s web page. All interaction is focused on fire safety information and updates on events or initiatives the bureau is involved in.

The bureau conducted many educational seminars designed around crowd management and increasing building owner awareness to common safety hazards found in entertainment venues. This project was implemented so patrons to our downtown events can enjoy our multitude of activities without undue risk, because the building owners and business managers were empowered with the knowledge of how to maintain a safe environment inside their buildings. The seminars were provided to a variety of target audiences including staff and management of SMG, JW Marriot, Amway Grand Hotel and Amway corporate special event planning group and the participating artists and venues of ARTPRIZE. In conjunction with the presentations, an internally produced quick reference guide was included to reinforce the large amount of information delivered and serve as a valuable tool for implementation of new ideas. Due to the success of these presentations and the positive feedback received, many other local corporations have inquired about similar opportunities in 2011.

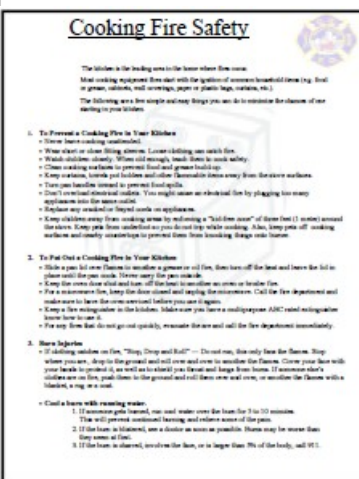


In 2010 the fire prevention bureau participated in the first Public Safety Expo, providing a glimpse inside the GRFD's daily activities that the general public doesn't normally have a chance to see. For example, Grand Rapids Mayor Hartwell demonstrated the use of the Jaws of Life to large crowd of onlookers. Other activities included a close view of equipment both old and new, trips through our fire safety house, smoke detectors and batteries to those families that need them and fire prevention safety handouts to all.



Other exciting activities during 2010 included guided tours of the fire safety trailer at the West Michigan Home and Garden Show to over 300 people. Those attendees were able to participate in the interactive learning environment of the trailer, covering a broad range of home fire and life safety tips.

Another high profile initiative concerning kitchen fires reached hundreds of people in Grand Rapids apartment buildings. Due to a rash of preventable kitchen fires and the statistical analysis performed by the Strategic Planning Office, we were able to target our high risk apartment buildings with educational material. We



conducted door to door informational handouts and group sessions using on duty fire crews which took the opportunity to talk to the residents on the importance of kitchen fire safety and what to do in case of a fire.



Special Events

The Fire Prevention Bureau oversees indoor and outdoor fire code compliance at events in the City of Grand Rapids. This is an essential service to the area; both vital to the economic success of unique marketing and business outreach, as well as the safety of the venue and its participants. 2010 was exceptionally diverse and unique. This includes many different types of education and enforcement avenues for various gathering venues both public and private. This service provides life safety for the citizens of Grand Rapids and its many visitors often located in the expanding commercial market for these attractions. Overall the bureau provided safety and supervised hundreds of private/public events for the citizens of Grand Rapids and its more than three million visitors.



For traditional venues, Grand Rapids is home to a 13,184 seat arena, nearly half-a-million square feet of “under roof” convention space and 2,000 acres of parklands, which accommodate hundreds of indoor and outdoor special events annually. The FPB works closely with the Office of Film, Music, and Special Events (OFMSE) for events held on public property. For private events the FPB works with individual organizations, building owners, and event coordinators. The application of the International Fire Code is used to provide standards for crowd management, evacuation, and preparation for emergency action.

ArtPrize, the world’s largest prize awarded for an art exhibition, held its second year in 2010. The bureau led safety efforts to educate and perform safety reviews for each building and associated event. This year over half-a-million votes were cast to the nearly 2000 artists’ work, scattered throughout 192 expanded venues.

2010 also proved to be full of events. Some of the events included art and entertainment displays, Rob Bliss activities (pictured World’s Longest Waterslide), private events, large budget films, over 40 high profile pyrotechnic and open flame events and several annual events as well. GRFD also had the opportunity to be featured in the film “In 30 minutes or less”.



Fire Investigations

In the State of Michigan, Fire Chiefs have statutory responsibility for reporting the origin and cause of fires resulting in property loss or injury to the State Fire Marshal's Office. In the majority of fire incidents, the fire officer or incident commander determines the fire origin and cause, then reports the determination via the Michigan Fire Incident Reporting System (MFIRS). In the case of larger property losses, severe fire casualties, or where the fire officer or incident commander is unable to determine the fire origin and cause, trained members of Fire Prevention Bureau may be requested to conduct an investigation as to the fire origin and cause.



Currently, four Fire Prevention Inspectors (FPIs) are cross-trained to provide fire investigation services. In 2010, two FPIs completed Michigan State Police's Fire Investigation II (Advanced) and PATC Hands-On Electrical Fire Investigation, two FPIs completed National Fire Academy Fire Dynamics – Fire Modeling, and all participated in tested online coursework provided by the International Association of Arson Investigators (IAAI) through CfTrainer.net. All four cross-trained FPIs are on schedule to complete the requirements necessary for certification as Certified Fire Investigator (CFI) provided by IAAI, as well as for certification as Certified Fire and Explosion Investigator (CFEI) through the National Association of Fire Investigators (NAFI). Fire Investigation training hours for 2010 totaled approximately 195 hours.

FPIs are trained to utilize a scientific methodology in their fire origin and cause investigations. This methodology generally consists of gathering data, analyzing that data, developing hypotheses as to the fire origin and cause, and testing those hypotheses to determine the validity of each hypothesis to reach a determination as to the origin and cause of the fire. FPIs investigated the fire origin and cause of more than 80 structure fires in 2010. Of these, the cause was determined to be incendiary in approximately 22 fires, with children playing with fire accounting for an additional 5 fires. Accidental causes were identified in approximately 46 fires. The cause could not be determined in approximately 10 fires. In all, more than 530 personnel-hours were spent on-scene (data gathering) for fire investigation in 2010. Data analysis, hypothesis development, and testing of hypotheses (including reporting of investigation results) accounted for more than 900 personnel-hours in 2010.





When the cause of a fire has been determined as incendiary (intentional), FPIs coordinate criminal investigation of the case with Grand Rapids Police Department (GRPD) detectives. In 2010, GRPD investigated 102 cases of arson in the City (not all of these were referred by GRFD) with 3 cases remaining open and 10 arrests resulting from the investigations.



Starting in July of 2010, an arsonist working mostly in SE Grand Rapids and northern parts of the City of Kentwood set a series of arson fires. A task force of fire investigation agency and law enforcement personnel was formed to identify and arrest the arsonist. Task force personnel included GRFD FPIs, GRPD detectives and uniformed officers, City of Kentwood Police Department detectives and uniformed officers, Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) fire investigators and Special Agents, as well as other Federal and State law enforcement personnel, with a total of more than 50 participants. The task force's activities culminated in the arrest of the alleged arsonist on October 17, 2010, demonstrating the high level of expertise and commitment deployed by the participants. The GRFD bureau investigators felt privileged to be able to team with such a dedicated, committed, and competent group of people in solving this unique case.

Emergency Management

2010 was very successful for preparedness planning, with the Emergency Management duties currently assigned to the Deputy Chief of Prevention. The year's highlight was a full-scale exercise in June, pictured below, which involved over 20 different agencies from the local, state, and federal levels, along with private sector partners, who responded together for a domestic terrorism incident at the Grand Rapids Water Filtration Plant located on the shore of Lake Michigan, in Ottawa County. This was the culmination of a two-year planning process to measure the level of preparedness planning that has taken place to protect a vital piece of our critical infrastructure, and a key resource for the region of West Michigan. The final step to this exercise process will be a tabletop exercise occurring in the Spring of 2011 to coordinate and test the recovery phase if such an incident were to actually happen.

Department of Homeland Security (DHS) grant funds were utilized to produce a training video of the exercise and pre-planning components, to assist and guide other jurisdictions and private sector organizations with similar infrastructure. To date, no other water system in the Great Lakes region has conducted an exercise of this magnitude.

2010 was also the year of increasing preparedness efforts for our functional needs population. While work and planning with the agencies that represent our citizens with special needs has been ongoing, the Department of Homeland Security has required that we meet specific measureable outcomes. Through the proactive interaction of the Disaster Mental Health and Human Services Committee of the Kent County Health Department, Kent County Emergency Management, and Grand Rapids Emergency Management, many of these investment projects were already in place, or in process, prior to the mandates from DHS.

The year ahead will hold many new initiatives and challenges for our all hazards emergency preparedness in Grand Rapids. We will continue to assess, evaluate, and develop our plans with our county partners of Kent, Ottawa, and Muskegon, and also with our private sector partners, to reduce the impacts and effects of any disaster whether natural or man-made, large or small.



Operations



The Operations Division is made up of a cadre of multi-talented individuals that prepare for and respond to a wide variety of emergency response incidents. While the traditional name “Fire Department” is commonly used to describe the organization, it does not give one a full or true understanding of what the department is operationally capable of doing. The Operations Division of the GRFD is “All Hazards” response capable. Firefighting, emergency medical care, hazardous material mitigation, weapons of mass destruction, technical rescue responses such as confined space, water, rope, building collapse, and trench are some of the type of emergencies prepared for and responded to.

Operations personnel with the exception of the Deputy Chief of Operations work a 24 hour workday. During this tour of duty, they are expected to respond to all emergencies they are dispatched to, complete all required and supplemental training, perform inspections, and complete all other duty related tasks and assignments. Companies are also assigned or volunteer to perform community interaction opportunities such as neighborhood meetings, block parties, school visits, parades and other events.

There are 11 strategically placed fire stations positioned throughout the city’s neighborhoods that are open to visitors, provide temporary refuge, and deliver community services such as city refuse sales and bike licenses. These stations provided living quarters for an average of 45 firefighters daily in 2010. They also house a vast array of emergency response apparatus.

The fire department continued to work in collaboration with neighboring communities. Automatic aid agreements with the cities of Kentwood and Walker, as well as the Township of Plainfield have been meaningful and reciprocal. Grand Rapids and Kentwood worked together on multiple occasions during a rash of arson fires on the cities borders. In 2011 the GRFD will be seeking to expand the geographical areas with our automatic aid partners, increasing our concentration wherever possible to address service gaps.

The GRFD serves nearly 190,000 citizens and is considered a metropolitan area due to the population density and makeup of the community. Daytime population can exceed 225,000 people encompassing the city’s 45.3 square miles. Many entertainment venues and activities such as Grand Rapids Griffins Hockey, Concerts, Blues on the Mall, Laugh Fest, and Art Prize attract an influx of people to the city. The wide variety of restaurants and bars also attract many suburbanites to the city’s core during the evening and early morning hours.

Grand Rapids had 25,090 apparatus responses to 19,634 emergency incidents, with 689 fires being mitigated in 2010. There was a 4.8% increase in emergency incidents from 2009. The department enjoyed a 97.28% property saved rate, meaning that only 2.72% of property affected by fire was lost. There were 25 civilian and 54 firefighter injuries for the year, and there were zero fire deaths. Property losses totaled \$9,443,315, but the property saved value totaled \$347,275,637.

The department was able to achieve its Distribution goal of having the first unit on scene in 6.5 minutes 87.6% of the time and its Concentration goal of assembling 19 firefighters on the scene in 10.5 minutes 72.9% of the time. These goals are necessary to reach it’s Effective Response Force to allow all the necessary critical tasking to be accomplished. The department strives to meet those stated goals 90% of the time. Emergency medical responses accounted for 64.1% of all emergency responses.

The GRFD will continually strive to be prepared and sufficiently staffed to respond to incidents of all types during this oppressive economic climate. The men and women of the GRFD are a proud and dedicated workforce that has always met the challenges before them.

Gerard Salatka

Deputy Chief of Operations

Battalion Chief

The Battalion Chiefs (BCs) remain the highest-ranking officers assigned to the 24-hour shift. The BCs are the pivotal managers within the organization, as they are part of the command staff which is an integral part of all the decisions made within the organization. Equally important is the role of liaison between the administrative offices and suppression personnel. There are currently 6 BCs, staffing two response districts. The 5th Battalion covers everything South of Fulton Street and east of the Grand River and currently work out of Franklin St. Fire Station. The 6th Battalion covers everything North of Fulton Street, as well as West of the Grand River south to the City Limits. This BC operates out of Monroe Avenue Station.



The BCs are Incident Commanders on emergency incident responses, and respond to most multi-company responses in their respective Battalions. BCs typically assume command of the incident, with the priority of life safety both for citizens and firefighters. They also ensure that the crews on scene have the appropriate resources available to do their jobs. On larger scale incidents both BCs may respond together as a command team, balancing risk to resources in the City and communicate with Dispatch.



July 2010, RRT Response—
28th St. SW (Assist Wyoming FD)



December 2010 structure fire—
1002 Leonard St. NW



2010 Celebration on the
Grand Fireworks



Camelot SE structure fire

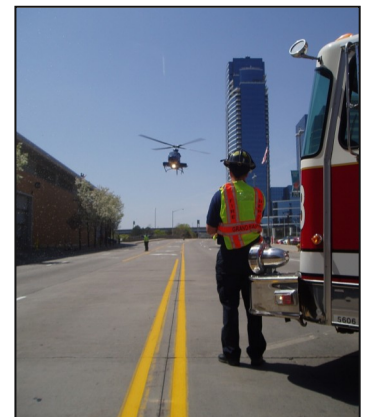
The BCs also act as supervisor when not on an incident scene for activities such as moving personnel/apparatus, training, community interaction and meetings. Administratively, BCs manage daily operations division staffing, personnel issues and several special events that arise.



HR Director Mari-Beth Jelks
ride along with BC Perry



Joint training with City of Walker at the DeltaPlex.



Engine 3 assisting a U of M
Medical Helicopter land State
of Michigan EMS expo in
Spring 2010



North Battalion

Battalion Chief Bart Perry

Emergency Medical Service

One of the service delivery missions that the Grand Rapids Fire Department currently enjoys providing is that of emergency medical care to our citizens and visitors. The Grand Rapids Fire Department responded to 12,401 medical calls in 2010. We currently have 203 State of Michigan licensed medical care responders, with licensure levels varying from Medical First Responder to Paramedic. Each State of Michigan Licensed EMS Care provider is required to maintain a three year licensure through a continuing education system of required “practical / hands on” credits and “lecture” credits. The Grand Rapids Fire Department is proud to be a State of Michigan Licensed EMS Continuing Education Program training site and an American Heart Association approved community training site. EMS “hands on” continuing education is provided to our responders on Monday afternoons with 42 scheduled sessions each year. These training sessions are facilitated by eight department licensed EMS instructors. The instructors have voluntarily accepted comp-time in lieu of overtime to assist our department and city during these difficult economic times, which saved the city approximately \$18,000 in 2010.

2010 Training Topics:

- Bleeding Control / Tourniquets
- Pediatric Immobilization
- START Triage
- Rapid Trauma Survey
- KED / Long Back-boarding
- Airway Adjuncts / BVM
- Pediatric resuscitation
- Disaster Planning
- Traction Splinting
- Vehicle Extrications
- Water Rescue

2010 Outcomes:

- State of Michigan Life Support Agency Licensure Renewed
- 25 GRFD Medical First Responder Vehicle Licenses renewed
- State of Michigan EMS Continuing Education Program licensure renewed through 6/30/2013.
- 53 State of Michigan responder licenses renewed
- 45 Continuing Education Training sessions conducted
- 380 student attendees
- Student to Instructor Ratio 8.5 : 1
- Student training session evaluation score 4.7 out of 5.0 (94% Approval)
- \$7,000 Grant secured to purchase 27 Automated External Defibrillator batteries



Critical Incident Stress Management (CISM)

CISM FACT: Firefighting is an inherently stressful job and our members are frequently exposed to mentally traumatic events.

CISM FACT: Firefighters are unique and a special breed that can be only understood by those who walk in their footsteps.

With these two thoughts in mind, the GRFD maintains a CISM team. The purpose is to provide peer support to the organization and other area departments following exposure to a critical or mentally traumatic event. The team also serves as a point of contact for our members who may suffer from cumulative stress.

2010 Outcomes:

- Two team activations
- Three members attended 2010 Michigan Crisis Response Association conference with grant money





Battalion Chief Frank Verburg

Department Physicals

The GRFD aligns itself with the annual physical requirements in NFPA 1001, a consensus standard for the fire service. Department physicals for 2010 were completed in a very timely manner in the months of February and March. 2010 also brought with it the H1N1 flu pandemic where GRFD had the personnel receive the vaccine in addition to the regular fall season flu vaccine. The 2011 physicals will follow the same format. GRFD continues its positive working relationship with Med 1 for all physical examinations.



2010 Outcomes:

- The safety and health of personnel addressed by the physicals, including Hazardous Materials physical components where appropriate
- No personnel identified as having medical deficiencies requiring any treatment or off-duty assignment
- All personnel received their physical in a near record time that did not affect many of the day-to-day operations

Grant Writing

As GRFD strives to maintain the standard of service that the citizens of Grand Rapids have come to expect, the department has had to find alternative methods to creatively fund projects and purchase equipment. GRFD's team of grant writers, under the leadership Battalion Chief Frank Verburg, has achieved relative success in doing just that. Grant writing is one example of GRFD's commitment to creating a sustainable organization that takes advantage of all available funding sources to carry out its mission. Following is a summary of the GRFD grant activity during 2010:

2007 Federal Emergency Management Agency (FEMA) Assistance to Firefighters Grant (AFG)—In 2010, GRFD closed out its 2007 AFG. Under the Fire Operations and Firefighter Safety activities of the grant, this **\$286,264** FEMA award (\$392,200 total request) allowed GRFD to purchase essential firefighter safety equipment that included 182 sets of turnout gear, 76 fire helmets, five thermal imaging cameras (TICs), nine treadmills and 17 portable radios.

2008 FEMA AFG—GRFD closed out the 2008 AFG Vehicle Acquisition grant in 2010. With this **\$800,000** FEMA award (\$1.3 million total request), the department purchased two 75' straight-ladder aerial quints. These smaller, quicker, more maneuverable trucks replaced two of the aging 100' platform aerials that no longer fit the operational models GRFD employed.



2009 FEMA AFG—This **\$272,160** grant (\$407,200 total request) was awarded in 2009. The equipment acquisition began in 2010 after the competitive bid process. Under the Equipment, Firefighter Training, and Firefighter Personal Protective Equipment activities of the grant, GRFD was able to purchase 41 mobile radios, a forcible entry simulator, a driving simulator, and 215 pairs of leather fire boots. This grant will benefit many and demonstrated collaboration with other City departments and the Grand Rapids Fire Regional Training Center (GRFRTC). The forcible entry simulator will be utilized by both GRFD and the GRFRTC. The driving simulator can be used by GRPD and any City department who operates heavy trucks, and can also train recruits in the GRFRTC.



2009 FEMA Staffing for Adequate Fire and Emergency Response (SAFER)

Grant—2009 was the first year that GRFD applied for a SAFER grant, and it proved to be a major victory for the citizens of Grand Rapids and the department. With the successful award of this **\$2.96 million** dollar grant, GRFD was able to refill 17 vacant positions that had been lost through attrition and layoffs. As a result of the increased staffing in 2010, response times decreased and overall effectiveness increased accordingly. In fact, in February of 2011, GRFD responded to a high-profile river rescue where two fishermen were pulled from the icy Grand River after their boat capsized. Of the five people directly involved in removing the victims from the water, three of them (including one who made a dramatic and timely rappel off a bridge to secure a victim) were firefighters that were funded by SAFER.

2010 FEMA AFG—GRFD was awarded a **\$178,000** (\$222,500 total request) AFG to upgrade its vehicle exhaust removal systems. The antiquated and obsolete system currently used to remove the carcinogenic diesel exhaust from running fire apparatus was in desperate need of replacement. Funding secured through the Facility Modification activity of AFG will allow the department to equip each of its diesel fire apparatus with an on-board exhaust filtration system. These units will protect firefighters from the harmful effects of diesel soot in the stations or at an emergency scene.

2010 Michigan Municipal Risk Management Association (MMRMA) Grant—All AFGs require GRFD to match 20% of the total award to share in the cost of the program or equipment. The \$240,000 driving simulator required GRFD to budget \$48,000 to cover the 20% match. The City's risk management insurance company awarded GRFD **\$23,100** to help cover half the cost of the matching contribution for the driving simulator. By requesting funding from MMRMA, the department was able to reallocate the \$23,100 savings to other areas of the budget. This is another example of the creative strategies that GRFD is using to demonstrate its commitment to find new and innovative ways to reduce spending.

2010 Fireman's Fund Heritage Foundation—Through the Fireman's Fund Insurance Company, GRFD applied for a new, more effective river rescue boat. The **\$16,250** request was approved in 2011 by their award committee.

2010 FEMA SAFER—Once again, GRFD hit the jackpot by being tentatively awarded a second consecutive SAFER grant—this time in the amount of **\$2.98 million dollars**. Funding from this grant would be used to refill 19 positions that were lost to layoffs and attrition. While GRFD was notified that they have been tentatively awarded the grant, it has not yet been accepted by the City. At the time of this report, City officials are attempting to meet criteria that would allow them to accept this award.





Battalion Chief Ron Tennant

2010 Awards Ceremony

On October 19, 2010, over 100 awards were presented to fire department members at the annual awards ceremony, held at the Donnelly Conference Center at Aquinas College. Honored guests in attendance included, City Manager Greg Sundstrom (pictured), Deputy City Manager Eric DeLong and Commissioners Elias Lumpkins, Ruth Kelly, Rosalynn Bliss, Walt Gutowski and James White.

Fire-based EMS was in the spotlight that evening as two patients revived by fire crews were in attendance to help recognize the outstanding efforts and skill of their rescuers. In all, 17 members were recognized for the successful resuscitation of patients in the field and six additional members were awarded the GRFD Live Birth Award for the emergency delivery and care of two infants.

Unit Citations were awarded for outstanding performance by fire companies at a Westside house fire in May of 2010. During that operation, two firefighters, David Fountain and Casey Spielmaker were awarded the GRFD Commendation Medal for the ladder rescue of three occupants trapped on the home's second floor balcony.

Career milestones honored that evening included Distinguished Service Awards for the Fire Academy Classes of 2004, 1995, 1990, 1985 and the Class of 1980, completing their 30th year of service in the GRFD. Firefighter Joe Dubay was presented with the Firefighter of the Year badge for being named 2010's Firefighter of the Year by the American Legion. Lastly, promotional certificates were presented to Chief Knapp and Chief Salatka to honor their promotions.

Mask Repair

One of the larger projects for the Mask Repair program evolved from ideas to upgrade the ADV and/or TR2 role in the Grand Rapids Fire Department into the equipping of TR2 (and eventual re-naming) for advanced Rapid Intervention, as well as coordinating the equipping and training of our new Rescue Company this summer. Another exciting and eventually cost-saving upgrade was the purchase and installation of an Oxygen generation system. This unit will allow the compression of medical grade oxygen, saving the purchase and rental costs that have traditionally existed. A third significant achievement was the procuring of a grant to purchase a new face piece fit tester, which is portable, more durable and more friendly for users.



Personnel:

The following members were a part of the mask repair program in 2010, and to them we owe a big thank you for the role they played in the successful program.

- Program Manager: Lt Kevin Carmel
- Assistant Manager: EO Joel Boyer
- Nick Bonstell, Denny Braate, Joe Donohoe, Matt Dumond, Doug Haisma, Jack Johnson, Matt Keusch, Craig Lewis, David Marchinda, Jeff Martin, Jim McIntyre, Nate Mulder, David Olivier, William Race, Mike Uzarski, Don VanDyke, Jason Zamarron

2010 Outcomes:

- New Oxygen Generation Unit specified, ordered, installed and in service
- New Facepiece Fit Tester in service
- Fit Testing of all Fire Department Members completed
- Required Flow Testing
- Required Hydro Testing
- General Repairs, Maintenance and upgrades

Resources:

In the calendar year 2010, a total of \$42,639.29 was spent for parts and equipment. A total of 225.75 hours were spent on repairs.



Oxygen Generation System

Extrication

One of the larger projects this year was the equipping, training and institution of our third Rescue Company, Rescue 7. A number of personnel and disciplines were involved in securing inventory so the company would be equipped identically to the other two Rescue Companies. The Rescue from LaGrave Ave. Station went through accelerated extrication training to get them to the same level as the other companies.

Personnel:

The following members were a key part of the extrication program in 2010

- Program Managers and training: Capt. Bruce Veldkamp, Capt. Dennis Haisma, Lt. Dave Noorman
- Maintenance: FF Jeff Lysiak, Rescue 5 B Shift crew

2010 Outcomes:

- Old Amkus equipment traded in for 3 Kodiak Strut Stabilizers Systems
- New Rescue Mannequin delivered and used by CSR crews, as well as extrication trainings
- Quarterly training at the junkyard
- 150 personnel trained in October



New rescue mannequin for CSR



Amkus tools traded in for the struts shown to side and below.



10-2-2010 – 15:39 Crews work a van vs. High-lift on I 196 under the Coit Avenue overpass



Extrication Demonstration at 2010 Fire Expo



South Battalion

Battalion Chief Dan Caillouet

2010 Special Operations

South Battalion is home for the leadership of all Special Operations activities. Under the auspice of Special Operations falls Hazardous Material Response, Water Rescue, Confined Space Rescue, Rope Rescue, Collapse Rescue, Trench Rescue, Vehicle and Industrial Rescue. The primary goal for all of these Special Operation response groups was to maintain a state of trained readiness. Through the diligence and dedication of our workforce, this was achieved!

2010 Outcomes:

- Maintain tactical response capability
- Members are not just trained, but will maintain the high qualified and competent rescue force for effectiveness
- Positioning for improving relations and funding probability within the Region 6 system

Targets:

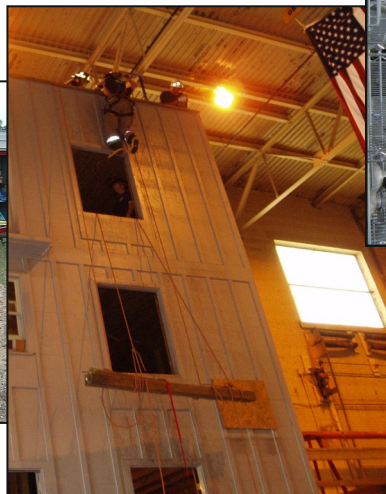
- Ability to complete training scenarios
- Continued enthusiastic cooperation and involvement at member and team leadership levels
- Feedback from trainers, members/participants and visual on site interaction and observation
- Actual incident success measured



Friday Haz-Mat Training



Multi-Agency Trench Collapse Training



High Angle Training



Water Rescue training utilizing Boat 1 in cold weather operations, deploying the custom rescue deck and preparing to conduct rescue drills and boat operations below the dam.



Battalion Chief Dan Stoddard

Fire Hose

The National Fire Protection Association (NFPA) standard 1961 regulates the maintenance and testing of fire hose. The thrust of NFPA 1961 is a timed pressure test of all hose owned by a fire department. The testing pressures are dictated by the various diameters of hose. The GRFD possesses 170 sections of 5" hose, 350 sections of 3" hose, 200 sections of 2.5" hose, 90 sections of 2" hose, 380 sections of 1.75" hose, and 40 sections of 1.5" hose; adding up to over 13¼ miles of hose!

2010 Outcomes:

- All in service fire hose in the GRFD was tested, with an average of only a 6% failure rate
- 38% of the failed hose has been repaired by Firefighter Kevin Fox

Fire Hydrants

The industry standard regarding hydrants identifies the need to insure proper working order of all fire hydrants. This is accomplished by a series of four rounds of checks, which include flushing, bobbing and pumping, lubricating and lastly removal of weeds. Tracking the repairs is also a necessity.

2010 Outcomes:

- Checked approximately 8,000 hydrants
- All hydrants East of the river were flushed

Dispatch Liaison

Responsibility to bridge the communication between GRFD and the City of Grand Rapids Dispatching Center. Priorities of the position are ensuring quality dispatching by addressing any discrepancies that may arise in the dispatching and response process, assist with training of future fire dispatchers and maintaining GRFD policies within the center.

2010 Outcomes:

- Completion of ECO III training: Kriston Boone, John Knol, Chris Korstange, Penny Skrycki, and Robert Smith
- Completion of Supervisory training: Loren Hebert and Kecia Williams
- No outstanding dispatching and response discrepancies

Airport Liaison

The GRFD is responsible for responding to incidents at the tower and terminal areas, as well as the new parking structure as well as, major aircraft emergencies. The liaisons key roles are communication with the airport and training to meet the Federal Aviation Administration requirements.

2010 Outcomes:

- All shifts from GRFD attend continuing education and training on the parking structure
- Creation and implementation of standard operating guidelines for airport and parking structure response
- The controlled Emergency Plan binders for GRFD were updated





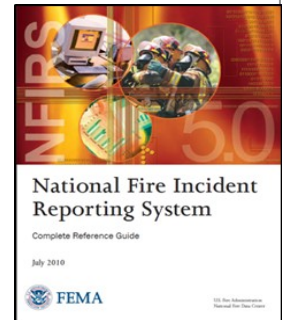
Battalion Chief Margaret Felix

NFIRS Program

The Federal Fire Prevention and Control Act of 1974 authorize the USFA's National Fire Data Center to gather and analyze information on the magnitude of the nation's fire problem as well as its detailed characteristics and trends. This led to the creation of National Fire Incident Reporting System (NFIRS) which has two objectives: To combat the fire problem at a national level and aid the state and local governments at assessing their fire risks. In GRFD, the NFIRS reports are continuously checked for accuracy, which requires continuous feedback and training.

2010 Outcomes:

- 19,561 reports submitted
- Quality Assurance reports were developed and instituted
- Continuous training was provided in multiple formats to all company officers
- Narrative information was added for all responding apparatus, monitored by the Battalion Chiefs
- Fire report errors improved from 20% to 4% needing repair, an improvement of 16%

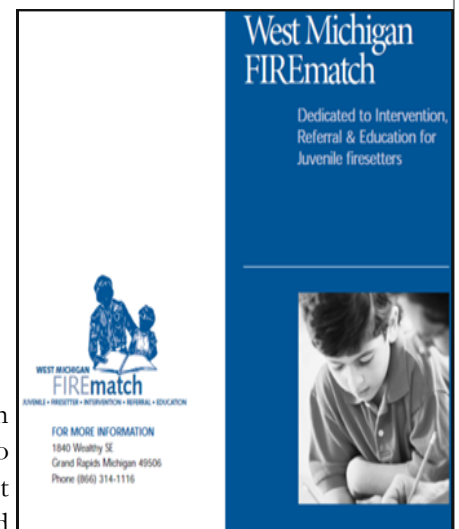


West Michigan Fire Match Program

When a child is identified as having a curiosity with fire play, they are referred to West Michigan Fire Match. Referral can be through a fire department, by a teacher, a social worker, probation officer or a parent. The family is then contacted by a Fire Match screener to identify the risk to the family and child for repeated fire play behavior. The GRFD has been a long standing member with supporting this program.

2010 Outcomes:

- 12 families referred to Fire Match
- 4 children counseled on scene by a company officer
- 8 children screened by a trained Fire Match screener with the families receiving fire educational material
- 4 children referred for mental health assistance
- 8 hours of fire education provided to families
- 2 smoke detectors were installed in children's bedrooms



Radios

Radios are an essential piece of equipment carried by all GRFD members when responding to an emergency incident. GRFD maintains the apparatus mounted radio as well as hand held radios. The program is administered by Captain Nancy Boss at the Chester Street Station. The purpose of this program is to maintain readiness and increase communication capabilities while utilizing fiscal responsibility.

2010 Outcomes:

- Purchased 10 new Vertex 924 hand held radios
- Programmed increased training channel frequencies into current radios
- Received \$26,881.00 in grant funds to purchase 41 new mobile radios
- Installed 53 Radios at a total cost of \$17,900.00



Training



Kevin Sehlmeier
Chief of Training

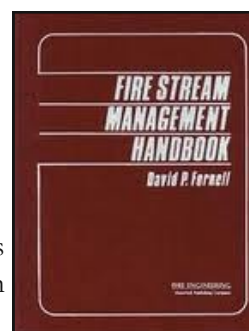


Dennis Haisma
Captain of Fire Training

The training provided and coordinated through the GRFD Training Division during 2010 included many areas that improved our ability to protect life safety, achieve incident stabilization and save property. While service delivery to the citizens of Grand Rapids is our main focus, the development of our employees' knowledge and skills help to provide a safer workplace is the fortunate end result.

2010 Outcomes:

- Hands-on and lecture classes were provided for the entire organization
- Training records switched to Access Kent Fire Training Database to increase query power
- 2010-1 and 2010-2 Recruit Academies resulting in 17 personnel
- Our Regional Training Center conducted 2010-1 Fire Academy
- All GRFD members passed the state mandated MFFTC/OFFT Driver Training Program
- The Training Division fostered a relationship with the Wind Energy Program at Grand Rapids Community College (GRCC) that now allows GRFD to use the auditorium at no cost when hosting RTC Fire Training Classes
- Added an Assistant Fire Training Supervisor position (Captain) in July 2010



Class brought in at
GRCC by GRFRTC

2010 Training Summary:

- January - Operational review utilizing FIRE TV (internal TV network) to expand on fireground operations during low staff levels. Focus was firefighter safety, risk/benefit analysis and alternate techniques to achieve incident stabilization.
- February/March - GRFD completed NIMS IS 100/200 training as required by the Emergency Managers Office.
- Spring/Fall - Rescue Companies participated in advanced hands-on training for vehicle/bus extrication.
- August - Rescue Companies participated in advanced Rapid Intervention training.
- December - GRFD began forcible entry training with new simulator funded by grant dollars and Rapid Intervention Crew training at 350 Michigan NE. Training was also conducted on the new Chevy Volt due to its 80% ultra high strength steel and the new median cable systems on highways.



Forcible entry training



RIC Training

2010 GRFD Recruit Classes

2010-1 Recruit Class

In early July, a five week “Advance Fire Fighting” training program that was created by the training division began. The recruit academy ended with 10 graduates assigned to fire suppression companies for their probation periods.

2010-2 Recruit Class

On September 20, 2010 Recruit Class 2010-2 started the adjusted “Advanced Fire Fighting” six week training process to further enhance several skills. During the 2010-2 recruit class the training division incorporated a training benchmark process on basic fireground tasks, to continually raise the bar and challenge the recruits for the first time in GRFD history.

At the end of 2010 there are 17 Recruit Fire Fighters assigned to fire companies. The training division continued to review the recruits for a calendar year from the time of hiring as a condition of the recruit’s employment. The nine fire fighters from the 2010-1 Recruit Class as they completed the GRFD physical agility test in October with an average time of 8:26. The eight firefighters from the 2010-2 class completed their test in an average time of 7:37.

GRFRTC

Fire Academy

On March 2, 2010 the 2010-1 GRFRTC Fire Academy, GRFD’s 2nd RTC academy, started with an enrollment of six students. The academy met Tuesday thru Friday until May 27, 2010. All students passed the MFFTC/OFFT Fire Fighter I & II written and practical exam. The class average on the MFFTC/OFFT Written Exam was 91.6%, which exceeds the internally identified goal of 90% or better for all tests taken during the academy.

The 2010-2 GRFRTC Fire Academy was postponed until March 1, 2011 due to GRFD 2010-2 Recruit Class. Two students from the 2009-1 GRFRTC Fire Academy (Balahoski, Atwood) and two students from the 2010-1 GRFRTC Fire Academy (Peck, Johnson) were hired by the Grand Rapids Fire Department in 2010.

Hosted Training Opportunities:

- January - 16 hour Educational Methodology class at GRFD training facility
- February - 80 hours NFPA Fire Inspector I class at GRFD training facility
- December - 8 hour Fire Tactics and Fire Streams class at GRCC by fire service author Dave Fornell
- December - 32 hour NFPA Plan Review class at GRFD training facility

Pat Deneau, for a Kendall College post-graduate project, photographed the 2010 recruit classes.



2010-1 Recruit Class



2010-2 Recruit Class



2010 Statistical Summary

This section will provide an in depth look at the emergency activity that occurred within the GRFD during the past year. Following is a detailed look at each of our 11 fire stations and the entire jurisdiction with several key terms/concepts that must be understood before proceeding:

Incidents in District: These are emergency incidents such as fires, emergency medical or other situations that required immediate assistance and took place within that station's territory.

Apparatus Responses: This is representative of the amount of emergency runs answered by units assigned to that station. This number will be higher than incidents, due to the fact that many types of emergencies require several units to respond into each other's area.

Distribution Compliance: The GRFD has a goal of getting the first unit on scene of an emergency within 6.5 minutes from the time the call entered dispatch until we arrive on scene 90% of the time. This takes into account call processing, turnout time (donning personal protective equipment and seat belting into the apparatus) as well as travel time from the fire station to the incident.

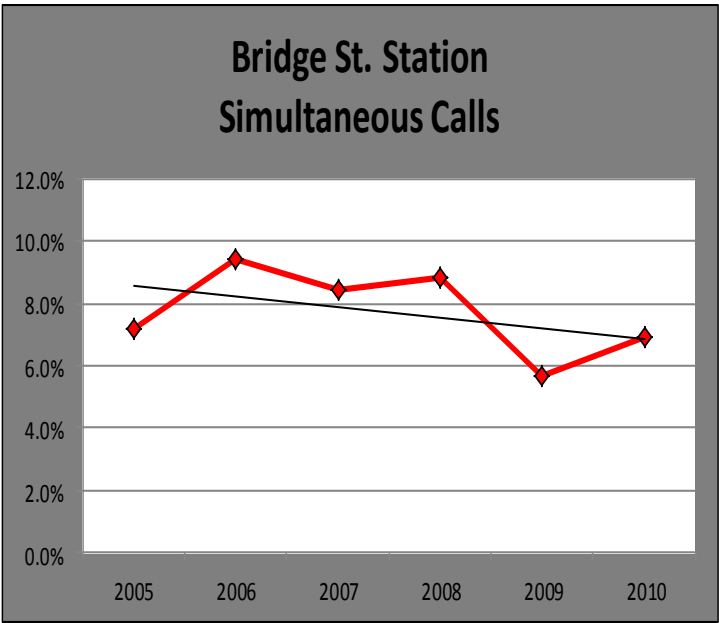
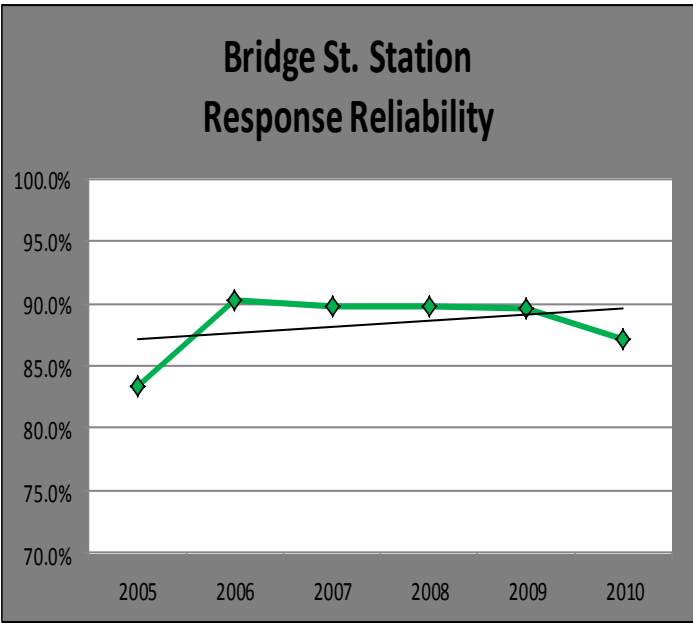
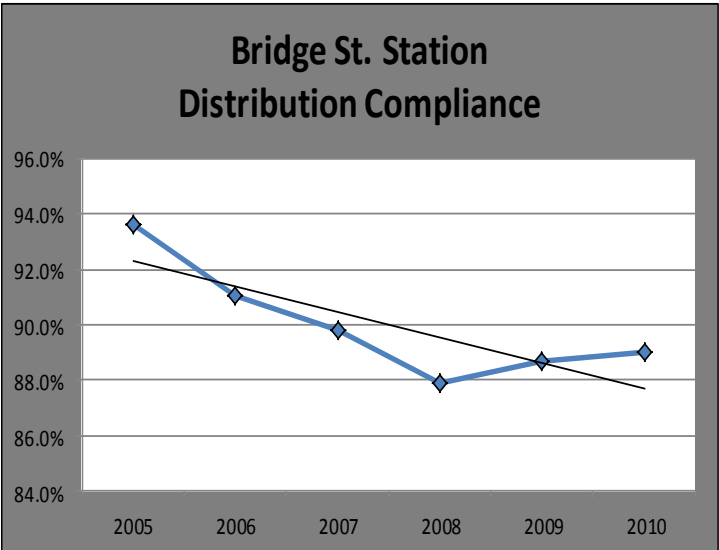
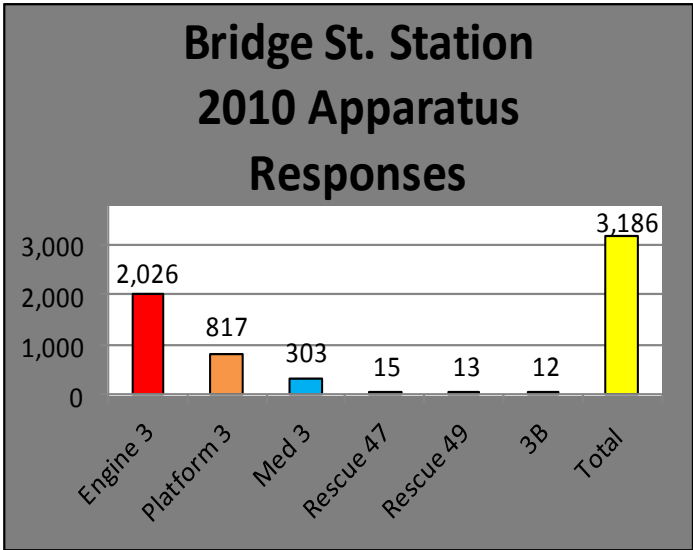
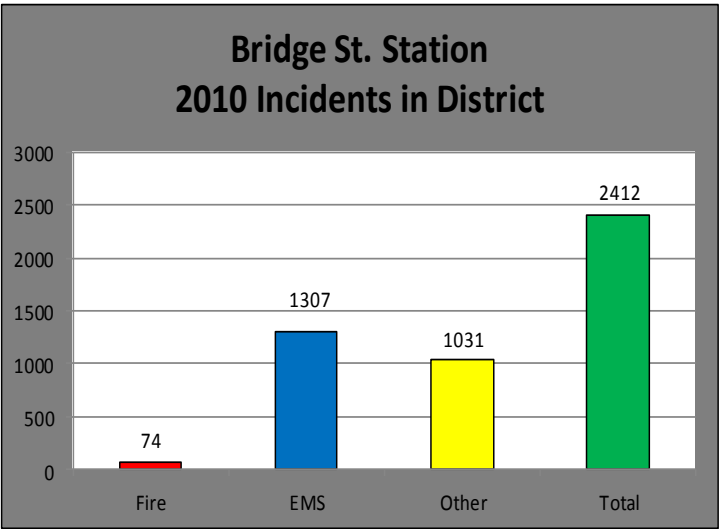
Response Reliability: Many activities that occur throughout the day will make a unit unavailable to answer an alarm in their first due district such as: already on another call, out of district, training, etc. Response reliability measures how often a station is first due on alarms in their district. A station with heavy call volume will often have multiple units to achieve an acceptable level of reliability.

Simultaneous Calls: When an incident occurs in a station's territory while another emergency is already underway. Once again, core stations with high call volume will usually experience higher volumes of simultaneous calls for assistance.

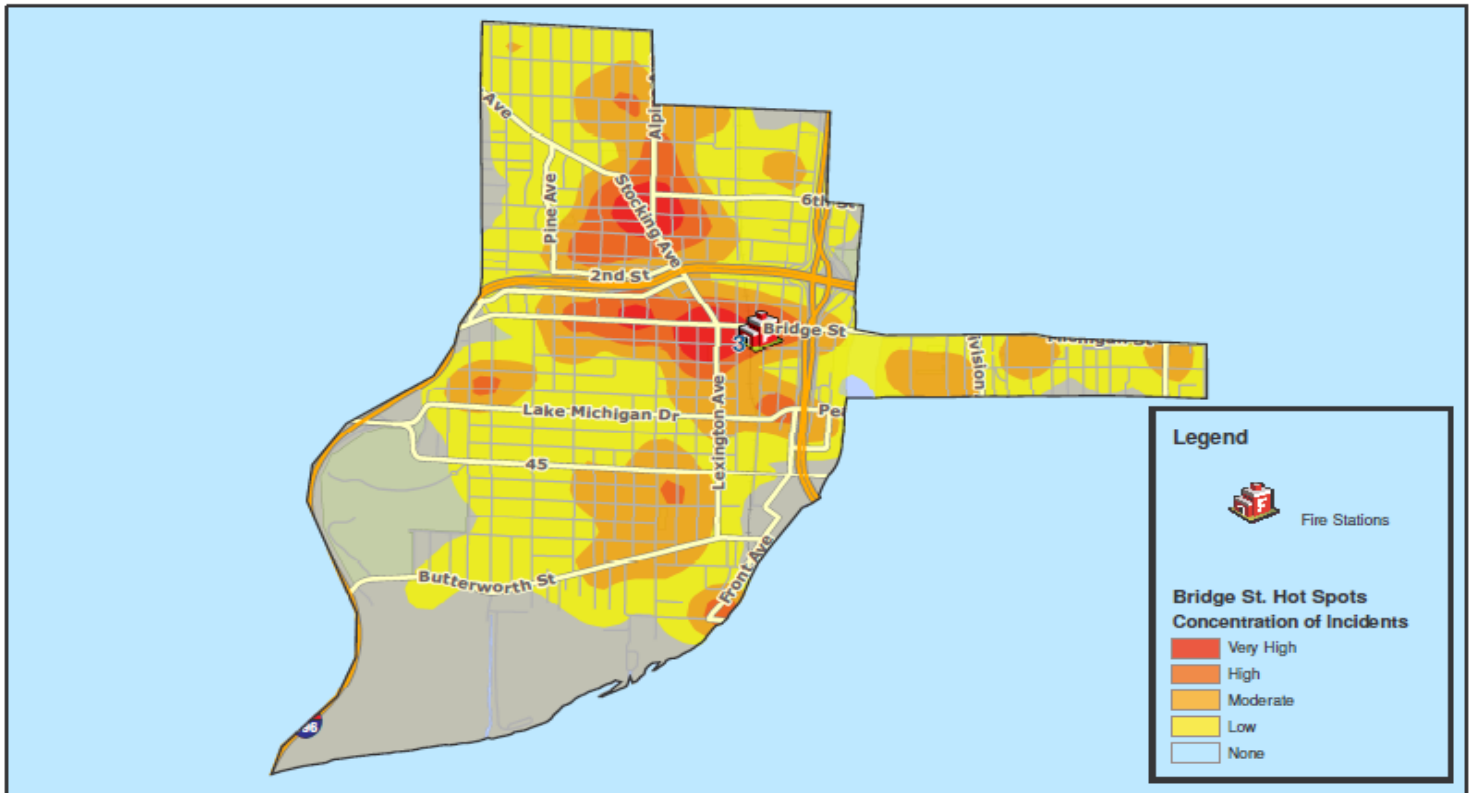
Hot Spot Map: A hot spot map displays the density of a particular jurisdiction's call volume and utilizes a ratio to assign areas that are more dense or "hotter" than the areas surrounding them. In the following station maps, dark red areas are considerably more busy than the rest of the fire station's district.

Temporal Analysis: Using temperature as a gauge much like the hot spot maps, this form of analysis will look at call volume based on the time of day and day of week. This allows operational decisions to be made, based on when a station is experiencing its busiest times of the day and week.

Bridge Street Fire Station



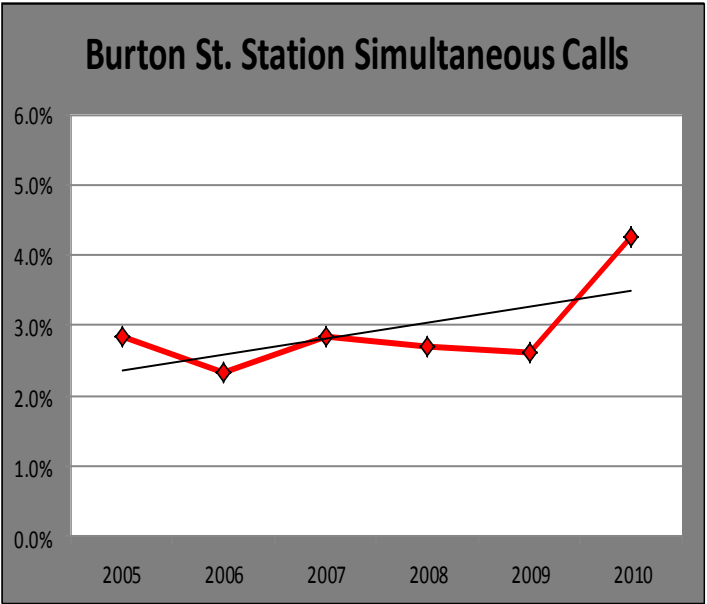
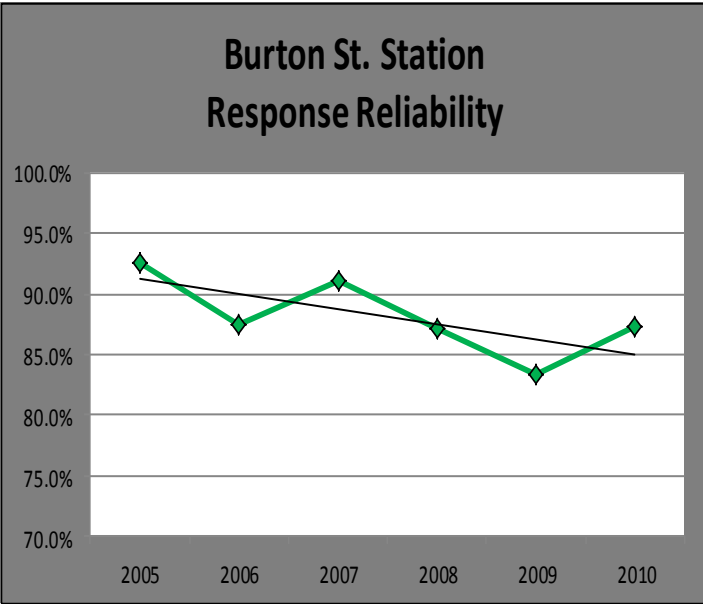
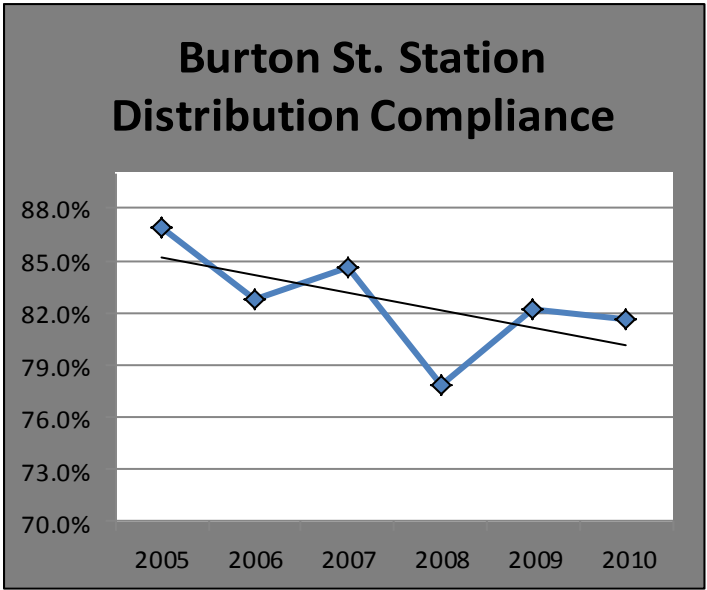
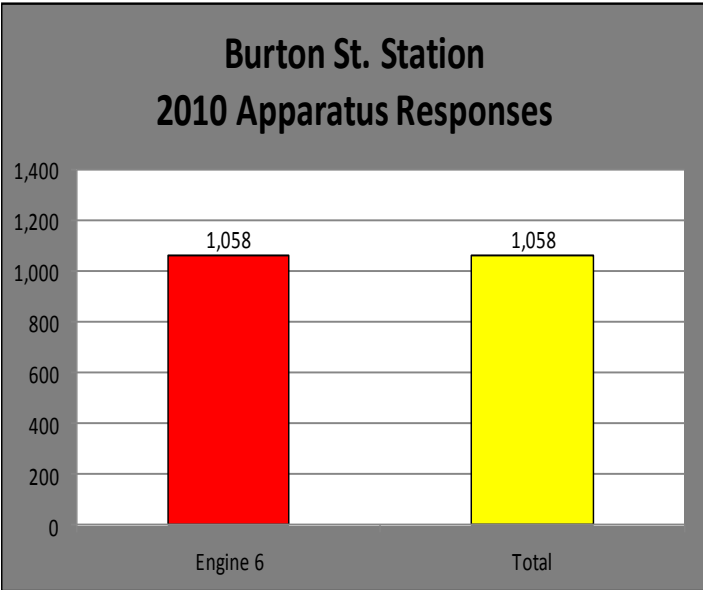
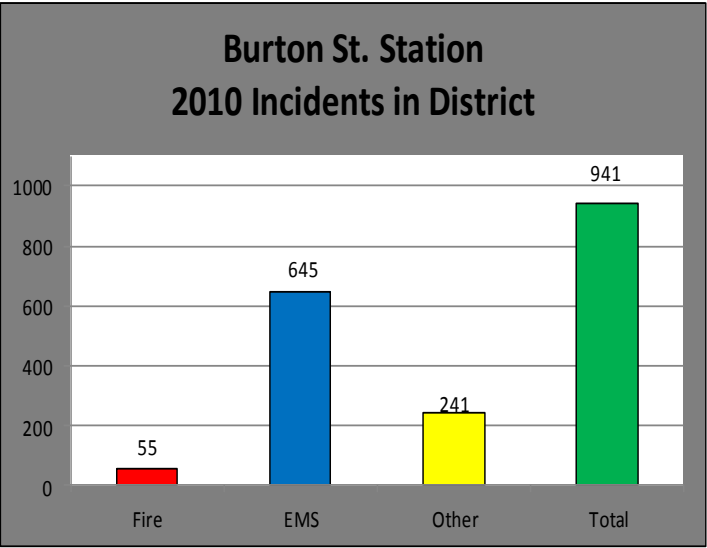
Hot Spot Map of Bridge St. Station's 2010 Incidents



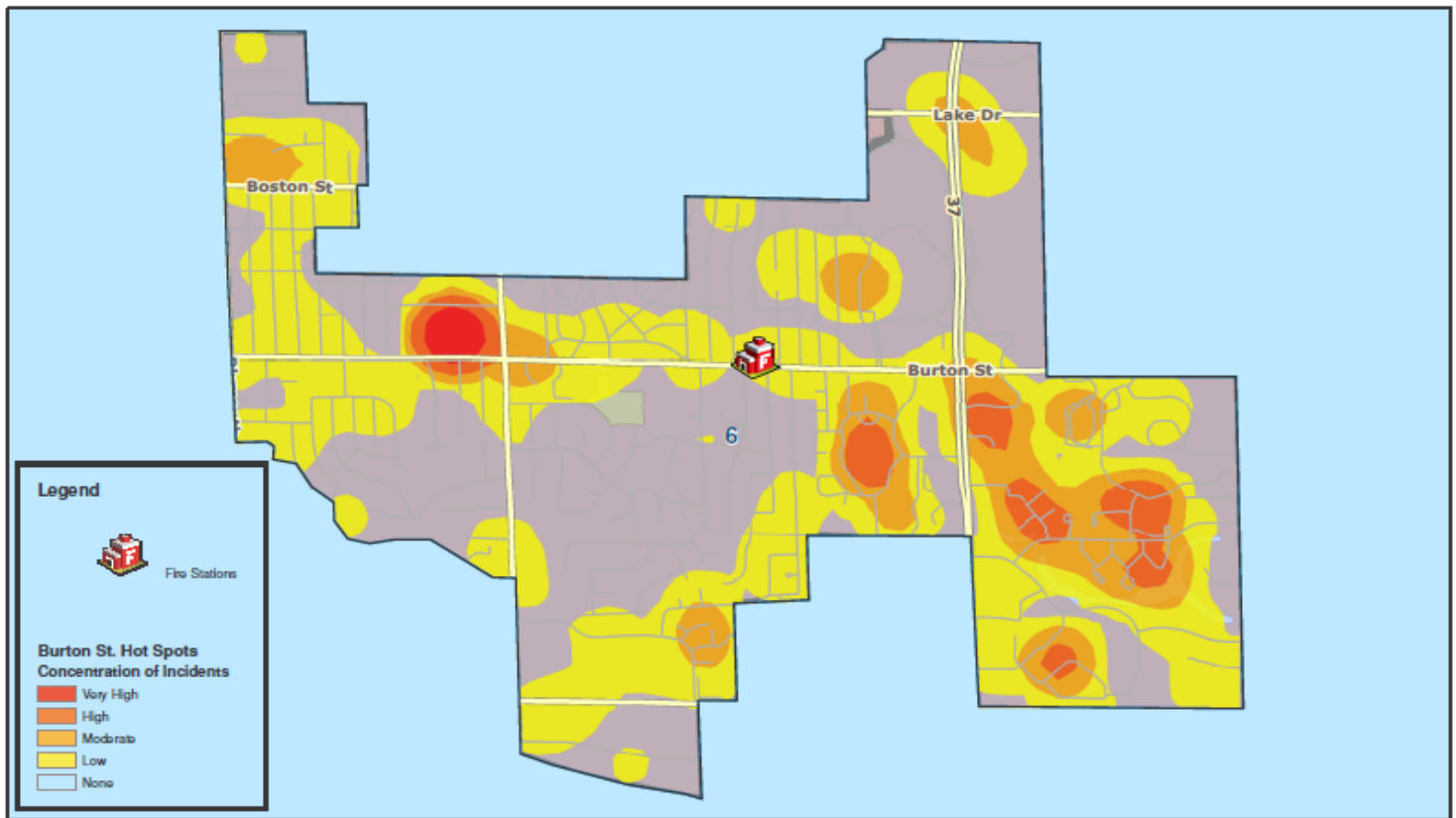
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	9	4	9	6	9	9	3	49
01:00-01:59	3	4	10	5	5	4	14	45
02:00-02:59	9	2	7	2	5	10	9	44
03:00-03:59	5	2	1	2	7	3	6	26
04:00-04:59	5	4	1	2	8	6	5	31
05:00-05:59	2	4	3	3	2	2	6	22
06:00-06:59	2	3	3	2	2	8	6	26
07:00-07:59	8	2	0	2	6	4	4	26
08:00-08:59	3	8	9	9	12	5	5	51
09:00-09:59	10	11	9	15	8	7	8	68
10:00-10:59	17	11	10	10	5	7	6	66
11:00-11:59	7	14	9	15	9	10	5	69
12:00-12:59	5	10	10	11	10	11	2	59
13:00-13:59	14	13	11	12	11	10	6	77
14:00-14:59	10	11	13	12	14	8	9	77
15:00-15:59	7	13	9	10	6	11	7	63
16:00-16:59	6	9	14	14	9	15	7	74
17:00-17:59	14	14	7	9	8	13	8	73
18:00-18:59	6	11	12	6	12	9	11	67
19:00-19:59	12	7	4	9	6	4	5	47
20:00-20:59	9	16	8	8	10	12	9	72
21:00-21:59	7	5	13	2	10	9	9	55
22:00-22:59	6	11	10	6	11	5	14	63
23:00-23:59	5	11	9	8	9	8	7	57
Total	181	200	191	180	194	190	171	1,307

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	2	1	0	2	0	1	1	7
01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	1	1	0	0	1	1	0	4
03:00-03:59	0	1	1	0	0	0	0	2
04:00-04:59	2	0	0	0	1	2	0	5
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	2	0	0	1	0	0	0	3
07:00-07:59	1	0	0	0	0	0	0	1
08:00-08:59	1	1	1	0	0	0	0	3
09:00-09:59	0	1	0	1	0	0	0	2
10:00-10:59	0	0	0	0	0	0	0	0
11:00-11:59	2	1	0	0	0	1	0	4
12:00-12:59	1	2	0	0	0	2	1	6
13:00-13:59	0	0	1	0	0	1	1	3
14:00-14:59	0	0	0	0	1	3	0	4
15:00-15:59	1	0	1	0	4	1	0	7
16:00-16:59	0	1	0	0	1	0	1	3
17:00-17:59	0	1	2	0	0	0	0	3
18:00-18:59	2	1	0	0	2	0	0	5
19:00-19:59	0	1	0	0	0	0	0	1
20:00-20:59	0	1	0	0	1	0	1	3
21:00-21:59	0	0	1	0	0	0	1	2
22:00-22:59	1	0	1	1	0	0	0	3
23:00-23:59	0	1	0	0	0	1	1	3
Total	16	14	8	5	11	13	7	74

Burton Street Fire Station



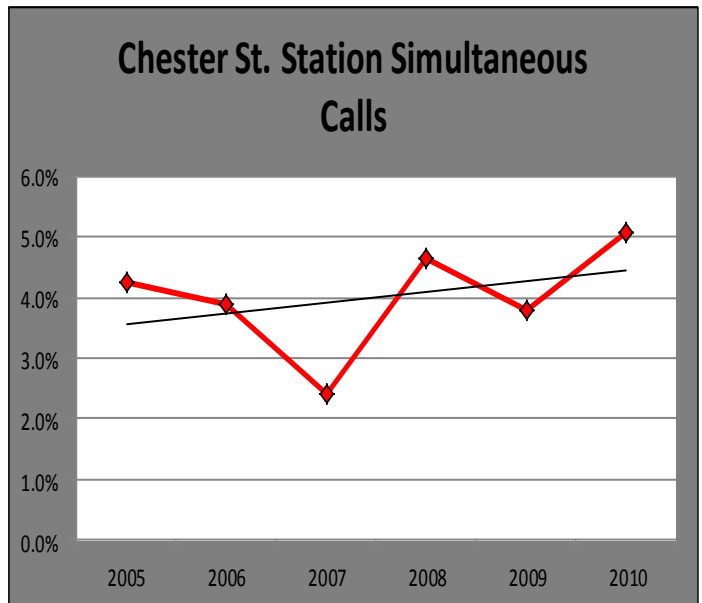
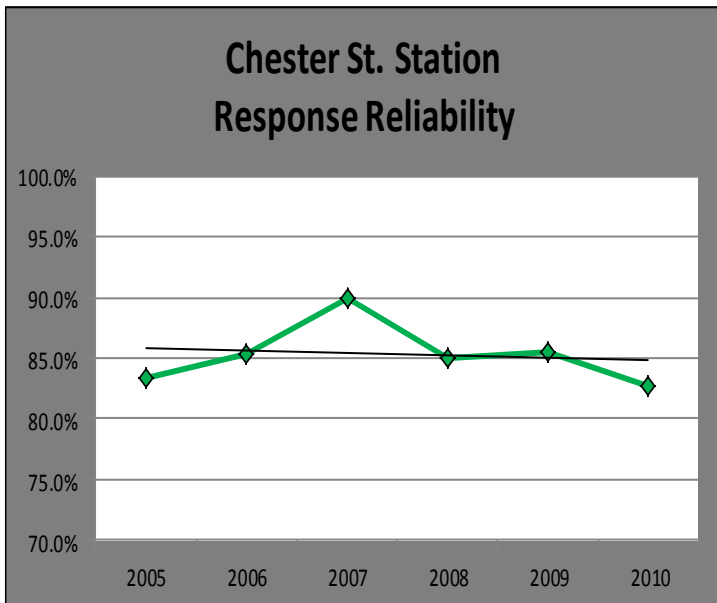
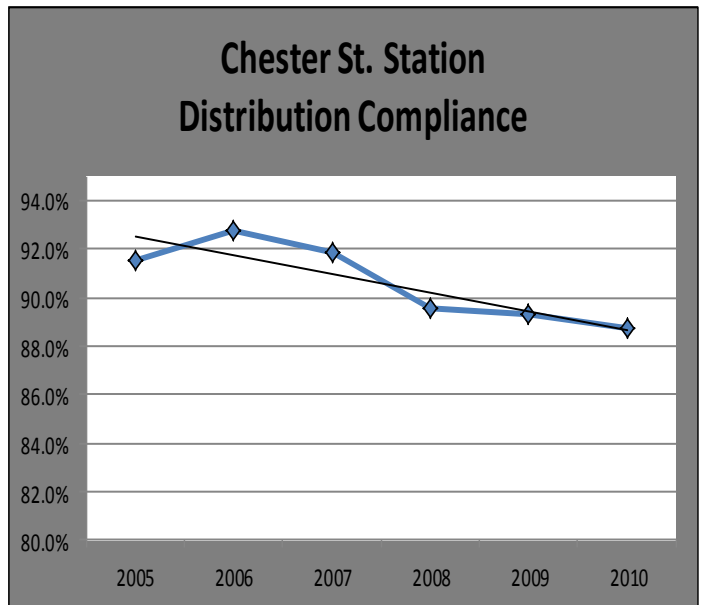
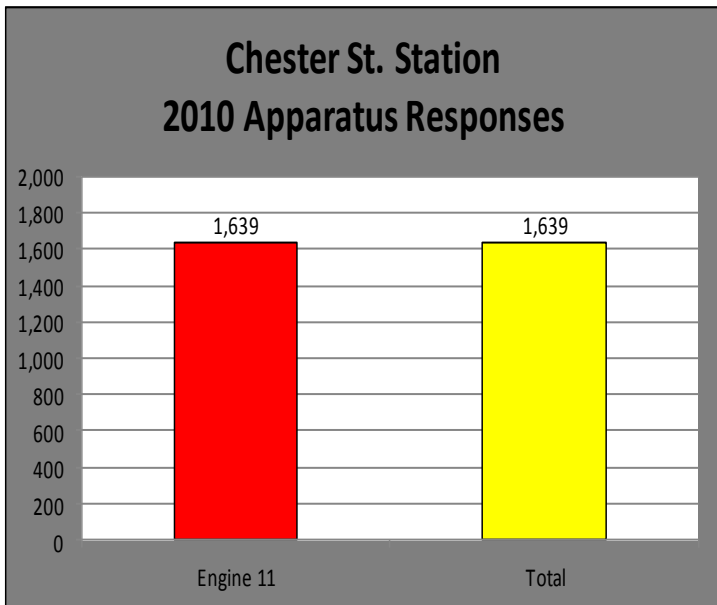
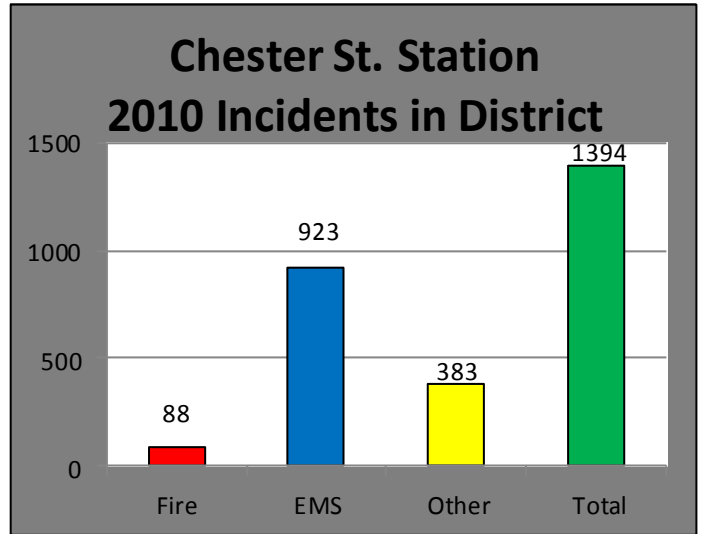
Hot Spot Map of Burton St. Station's 2010 Incidents



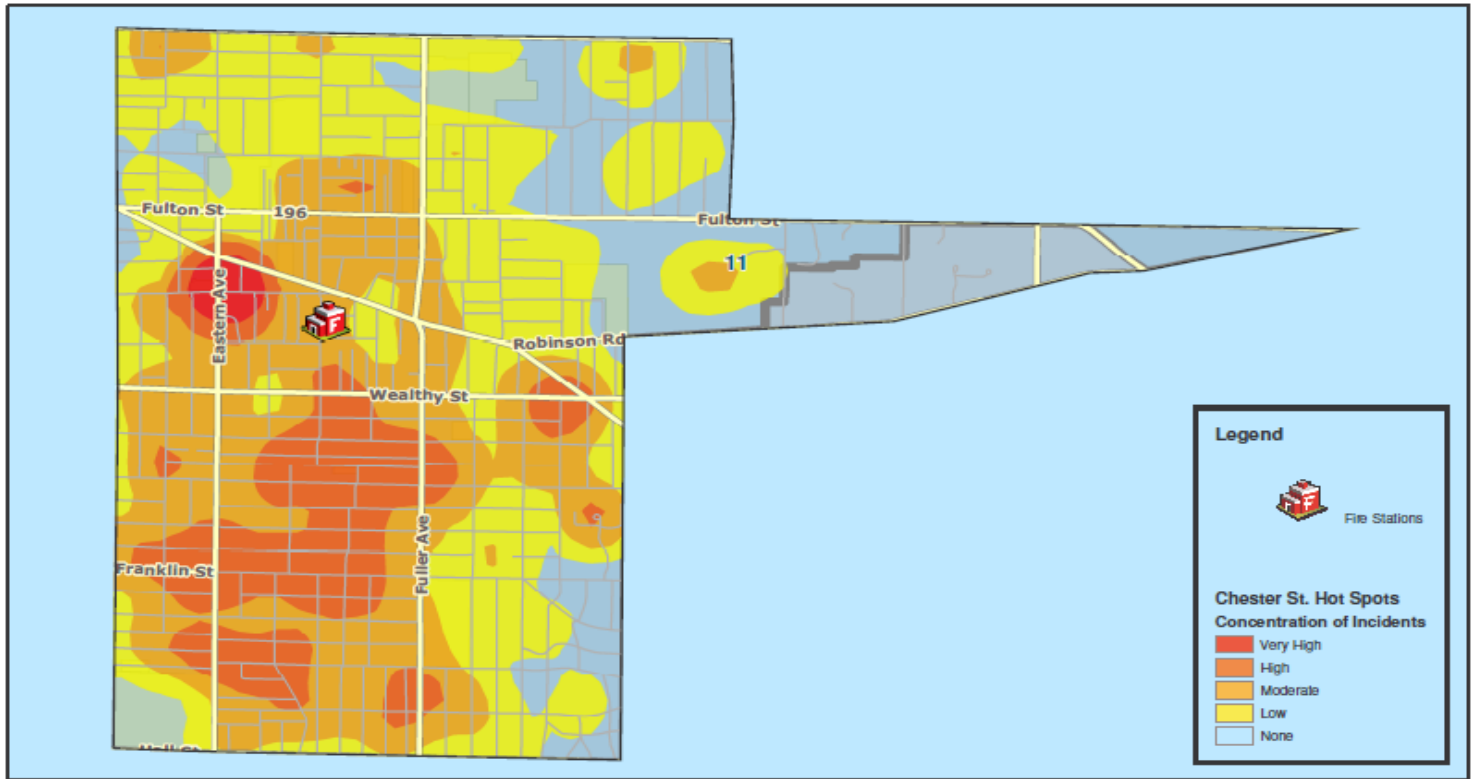
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	2	3	2	2	3	3	7	22
01:00-01:59	4	3	2	4	3	4	1	21
02:00-02:59	2	3	2	0	3	4	1	15
03:00-03:59	2	2	0	2	6	3	3	18
04:00-04:59	1	1	2	1	4	3	4	16
05:00-05:59	3	1	2	1	0	2	0	9
06:00-06:59	2	2	5	0	2	0	3	14
07:00-07:59	2	3	3	3	0	2	2	15
08:00-08:59	4	7	9	6	4	2	5	37
09:00-09:59	4	1	6	3	9	5	4	32
10:00-10:59	7	6	4	7	3	3	5	35
11:00-11:59	6	8	5	4	7	8	3	41
12:00-12:59	6	4	8	5	7	3	8	41
13:00-13:59	5	3	6	4	5	4	7	34
14:00-14:59	3	5	7	6	6	3	6	36
15:00-15:59	4	6	9	3	3	3	4	32
16:00-16:59	5	5	7	9	5	5	0	36
17:00-17:59	3	2	6	1	6	4	4	26
18:00-18:59	8	5	4	4	8	3	3	35
19:00-19:59	4	2	1	3	4	3	4	21
20:00-20:59	5	4	3	2	11	3	2	30
21:00-21:59	3	3	6	2	3	3	5	25
22:00-22:59	6	5	5	7	1	6	3	33
23:00-23:59	0	3	2	7	3	3	3	21
Total	91	87	106	86	106	82	87	645

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	1	0	0	0	0	0	1
01:00-01:59	2	0	5	1	0	1	0	9
02:00-02:59	0	4	0	0	0	1	2	7
03:00-03:59	1	0	0	1	1	0	0	3
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	1	0	0	0	0	0	1
07:00-07:59	0	1	0	0	0	0	0	1
08:00-08:59	0	0	0	1	0	0	0	1
09:00-09:59	1	0	0	0	0	0	1	2
10:00-10:59	0	0	0	1	1	1	0	3
11:00-11:59	0	0	0	0	0	0	1	1
12:00-12:59	0	0	0	0	1	0	0	1
13:00-13:59	1	0	0	0	0	0	0	1
14:00-14:59	0	0	0	0	1	0	0	1
15:00-15:59	0	0	0	0	1	0	0	1
16:00-16:59	1	2	0	0	0	0	0	3
17:00-17:59	0	0	0	1	1	0	0	2
18:00-18:59	0	0	0	1	0	2	0	3
19:00-19:59	0	0	1	0	1	0	1	3
20:00-20:59	1	1	0	1	2	1	0	6
21:00-21:59	1	0	0	0	0	0	0	1
22:00-22:59	0	0	0	0	1	0	2	3
23:00-23:59	1	0	0	0	0	0	0	1
Total	9	10	6	7	10	6	7	55

Chester Street Fire Station



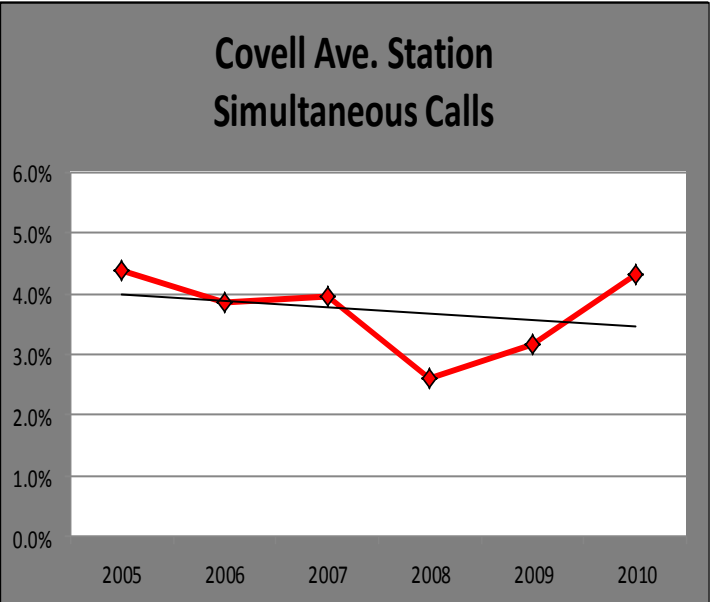
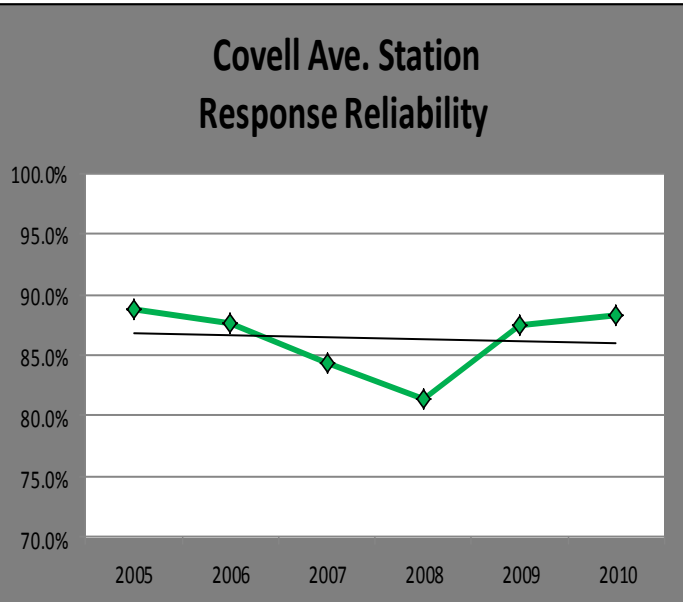
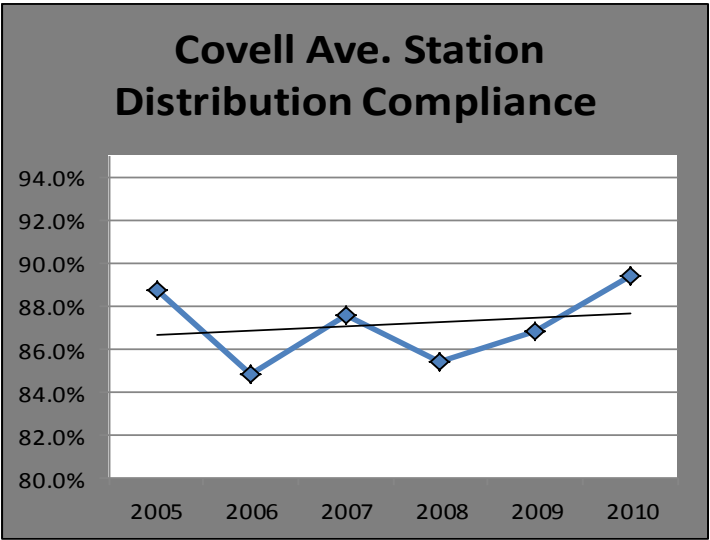
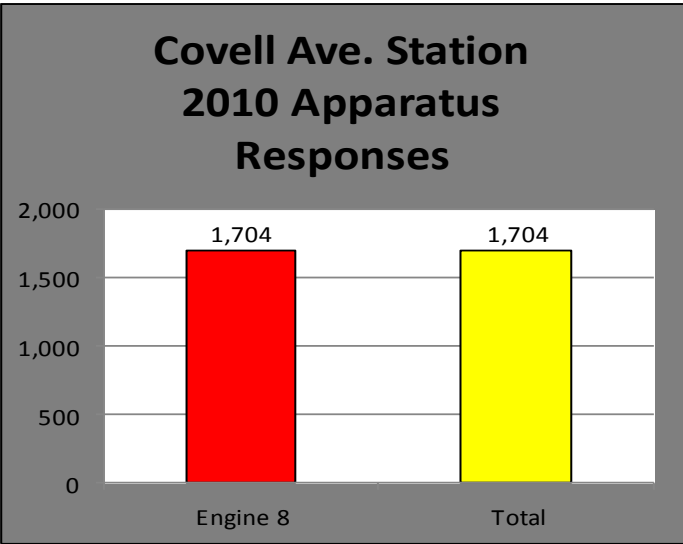
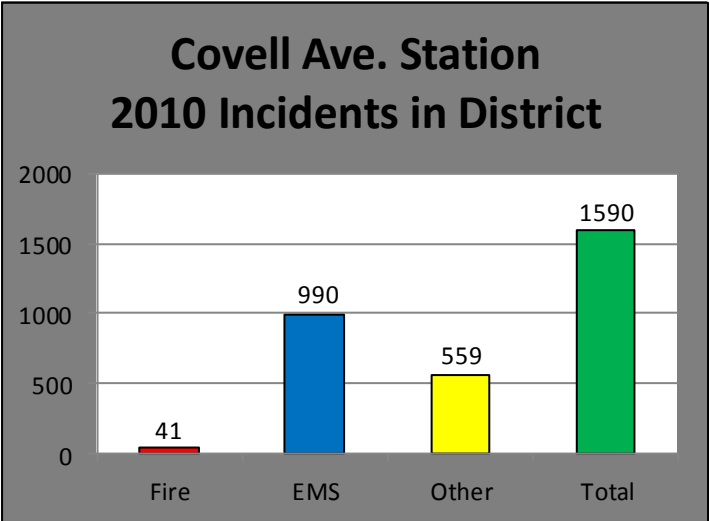
Hot Spot Map of Chester St. Station's 2010 Incidents



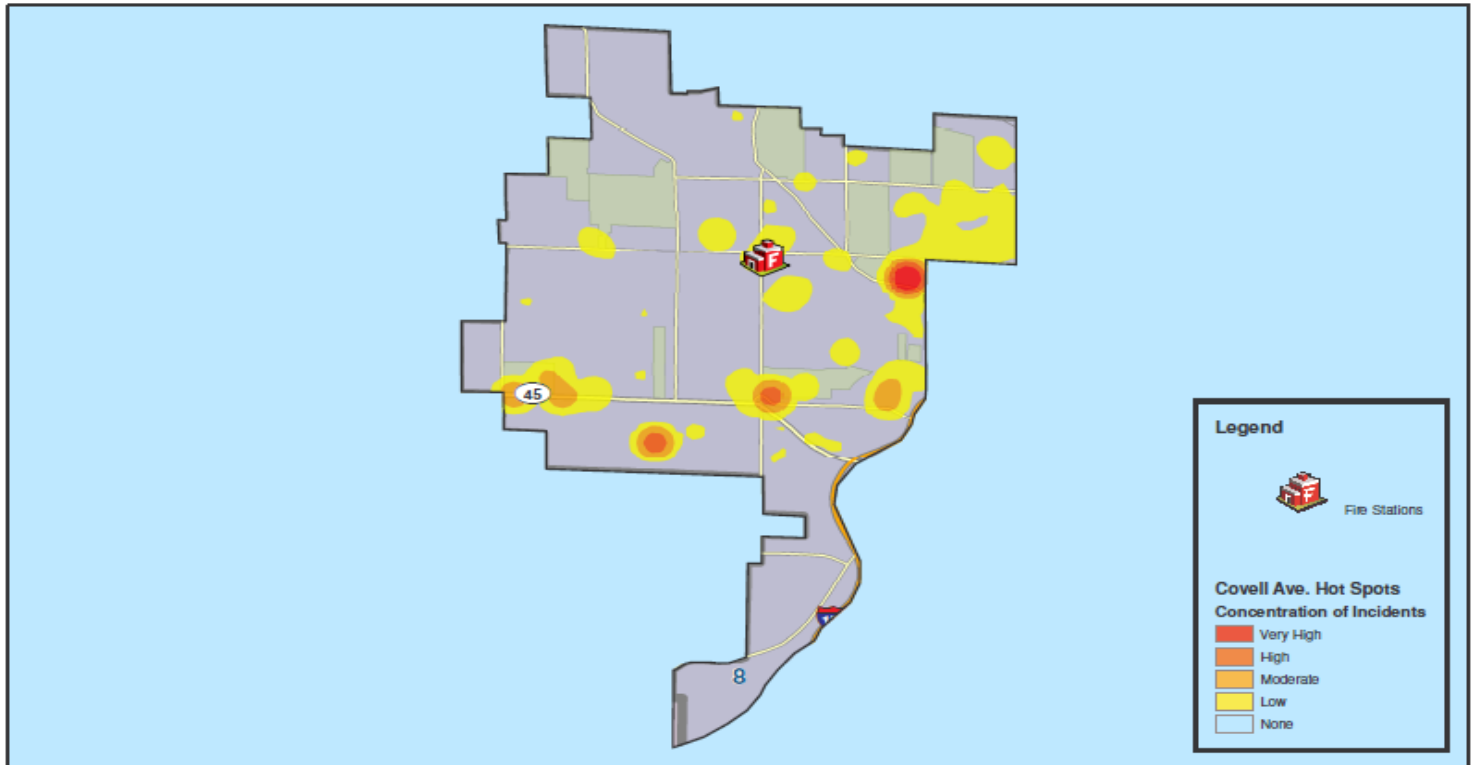
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	4	5	5	3	3	10	5	35
01:00-01:59	8	6	2	5	1	3	7	32
02:00-02:59	1	4	3	2	7	4	6	27
03:00-03:59	5	2	2	3	3	4	4	23
04:00-04:59	4	1	3	5	3	2	4	22
05:00-05:59	2	2	1	2	2	4	4	17
06:00-06:59	3	2	1	4	6	4	0	20
07:00-07:59	8	1	7	3	2	2	2	25
08:00-08:59	4	6	2	4	4	4	7	31
09:00-09:59	7	4	8	7	1	4	2	33
10:00-10:59	4	3	4	5	9	6	10	41
11:00-11:59	11	7	9	4	9	6	6	52
12:00-12:59	7	4	7	12	7	4	7	48
13:00-13:59	10	4	3	7	14	9	1	48
14:00-14:59	13	8	7	7	8	15	6	64
15:00-15:59	8	4	11	4	11	8	8	54
16:00-16:59	14	10	10	6	7	6	9	62
17:00-17:59	8	5	5	12	8	4	5	47
18:00-18:59	7	5	6	8	11	4	8	49
19:00-19:59	4	11	8	2	9	9	2	45
20:00-20:59	4	7	6	6	8	7	7	45
21:00-21:59	6	6	7	7	3	9	5	43
22:00-22:59	4	3	4	7	5	5	4	32
23:00-23:59	4	6	3	2	6	5	2	28
Total	150	116	124	127	147	138	121	923

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	1	0	1	1	1	0	0	4
01:00-01:59	0	1	0	0	0	2	0	3
02:00-02:59	1	3	0	0	0	0	1	5
03:00-03:59	1	1	0	1	1	0	0	4
04:00-04:59	1	0	0	0	0	0	0	1
05:00-05:59	1	0	0	0	0	0	0	1
06:00-06:59	1	1	0	0	0	0	1	3
07:00-07:59	0	0	1	0	1	0	0	2
08:00-08:59	1	0	0	0	0	2	0	3
09:00-09:59	1	1	1	1	0	0	0	4
10:00-10:59	0	0	0	0	0	0	0	0
11:00-11:59	1	1	1	0	1	0	1	5
12:00-12:59	3	2	1	0	0	0	1	7
13:00-13:59	0	0	1	0	2	0	1	4
14:00-14:59	1	1	1	1	1	0	1	6
15:00-15:59	1	0	1	0	1	1	0	4
16:00-16:59	2	1	0	1	1	0	1	6
17:00-17:59	1	0	1	0	1	0	0	3
18:00-18:59	2	0	0	0	1	0	1	4
19:00-19:59	2	0	1	1	1	0	0	5
20:00-20:59	0	1	0	0	0	3	2	6
21:00-21:59	0	0	0	0	0	0	1	1
22:00-22:59	2	0	0	1	0	1	0	4
23:00-23:59	0	2	1	0	0	0	0	3
Total	23	15	11	7	12	9	11	88

Covell Avenue Fire Station



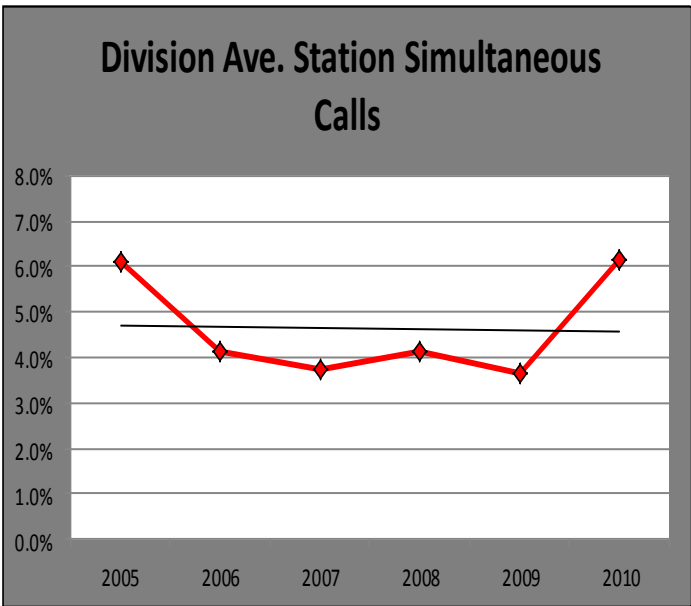
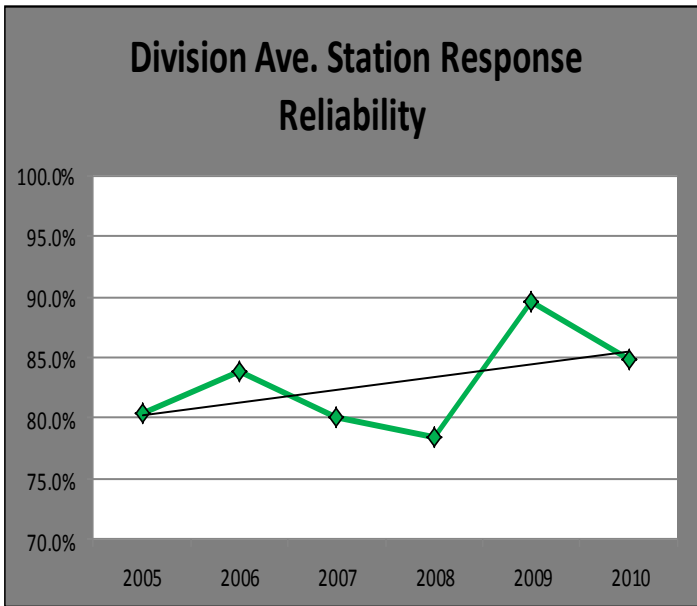
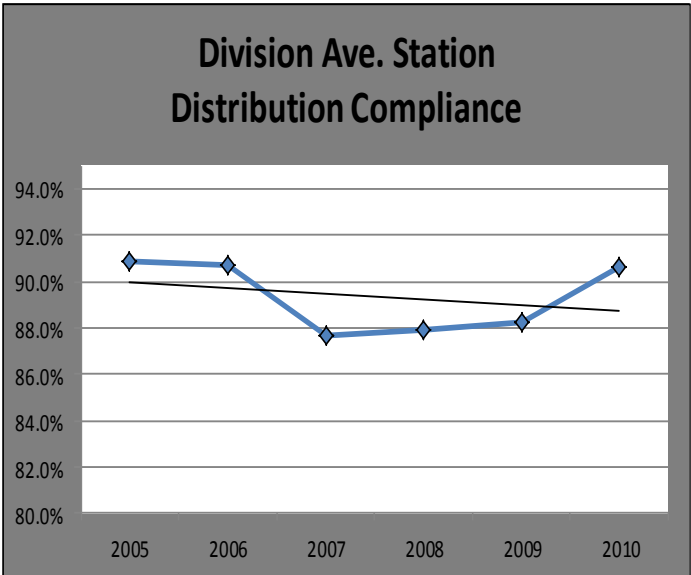
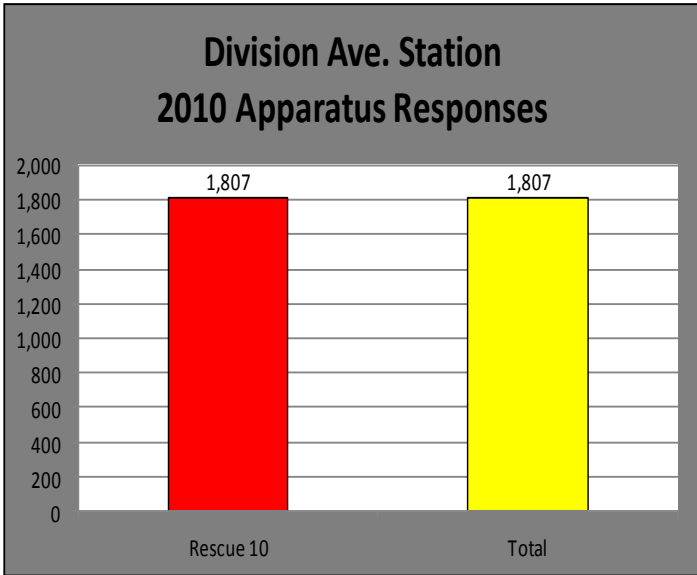
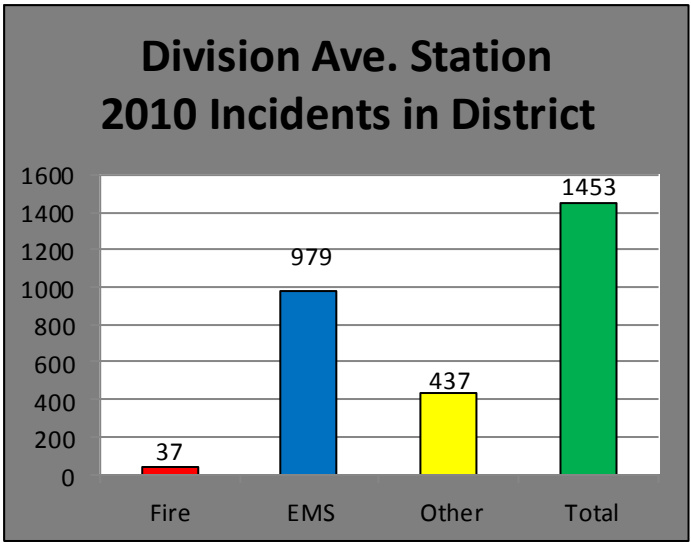
Hot Spot Map of Covell Ave. Station's 2010 Incidents



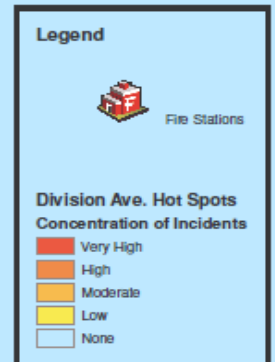
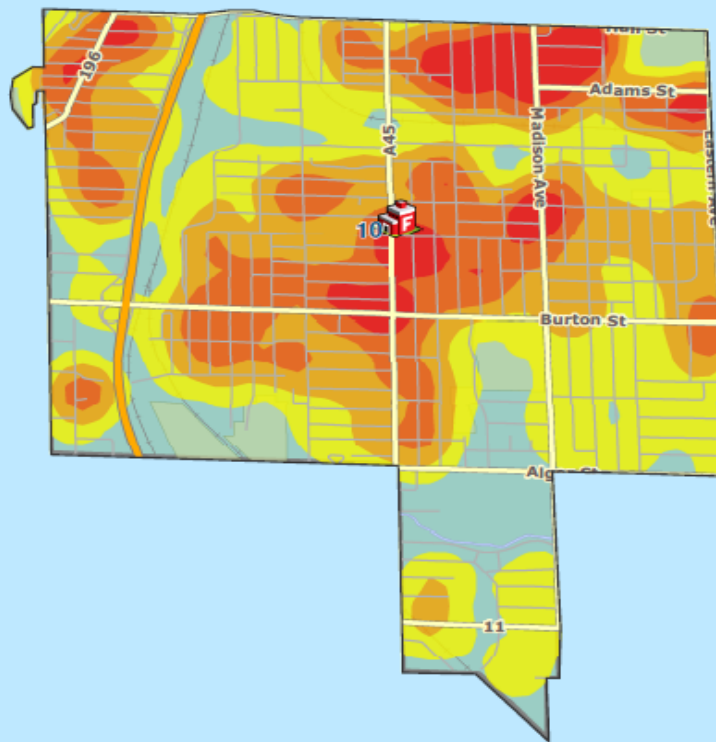
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	5	4	4	3	4	4	2	26
01:00-01:59	3	2	1	4	3	5	4	22
02:00-02:59	7	4	5	4	1	4	4	29
03:00-03:59	2	3	3	2	3	2	6	21
04:00-04:59	4	2	2	2	3	5	3	21
05:00-05:59	1	7	3	5	3	4	1	24
06:00-06:59	4	1	6	10	3	3	3	30
07:00-07:59	4	5	8	7	12	5	3	44
08:00-08:59	10	3	3	14	6	12	9	57
09:00-09:59	7	3	8	9	7	6	8	48
10:00-10:59	7	7	7	8	6	6	7	48
11:00-11:59	17	13	14	12	8	3	7	74
12:00-12:59	8	4	7	8	14	7	9	57
13:00-13:59	13	8	5	8	5	9	11	59
14:00-14:59	8	9	8	9	3	7	8	52
15:00-15:59	5	5	8	7	9	5	8	47
16:00-16:59	9	7	9	4	5	7	4	45
17:00-17:59	4	11	6	5	5	10	7	48
18:00-18:59	4	4	4	14	10	10	7	53
19:00-19:59	10	9	5	3	7	6	10	50
20:00-20:59	3	6	4	7	5	2	9	36
21:00-21:59	5	6	3	4	6	3	2	29
22:00-22:59	4	8	8	8	1	7	4	40
23:00-23:59	5	2	7	2	4	5	5	30
Total	149	133	138	159	133	137	141	990

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	0	1	0	0	0	1
01:00-01:59	0	1	0	0	0	0	0	1
02:00-02:59	0	0	0	0	0	1	0	1
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	1	0	0	0	0	1
06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	2	0	0	0	0	0	0	2
08:00-08:59	0	0	0	0	1	0	0	1
09:00-09:59	0	0	0	0	0	1	0	1
10:00-10:59	0	0	0	1	1	1	0	3
11:00-11:59	1	0	0	0	0	0	0	1
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	0	1	0	0	1	0	0	2
14:00-14:59	0	0	0	2	1	0	1	4
15:00-15:59	0	0	1	0	0	1	0	2
16:00-16:59	0	1	1	0	0	1	0	3
17:00-17:59	0	0	0	0	0	1	0	1
18:00-18:59	1	0	0	0	1	0	1	3
19:00-19:59	0	0	0	1	0	1	0	2
20:00-20:59	0	1	0	0	0	1	0	2
21:00-21:59	0	1	0	3	0	0	1	5
22:00-22:59	0	2	0	0	0	0	0	2
23:00-23:59	1	0	0	0	0	0	1	2
Total	5	7	3	8	5	8	5	41

Division Avenue Fire Station



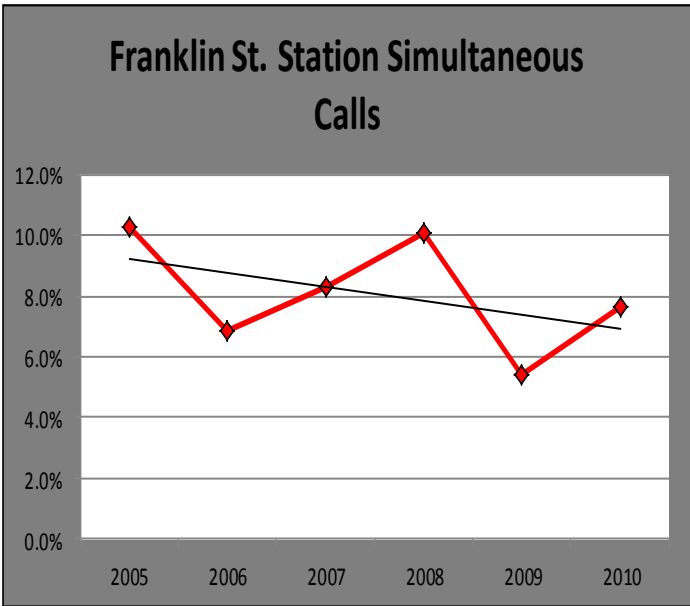
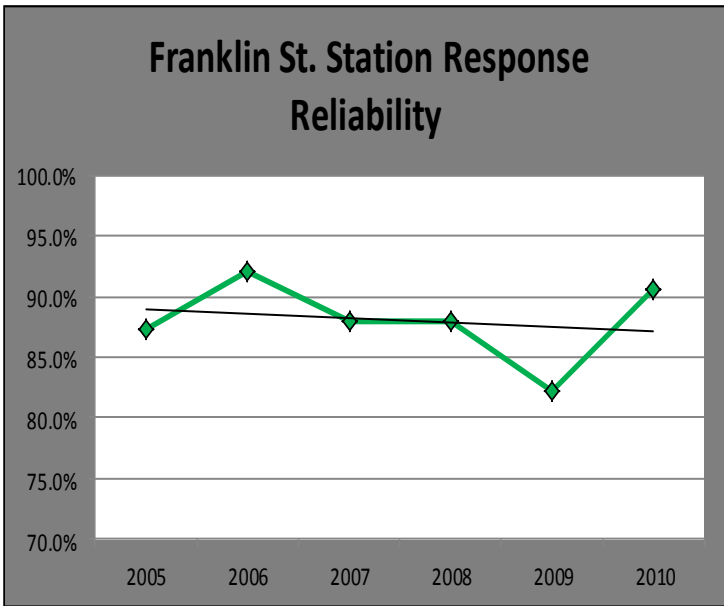
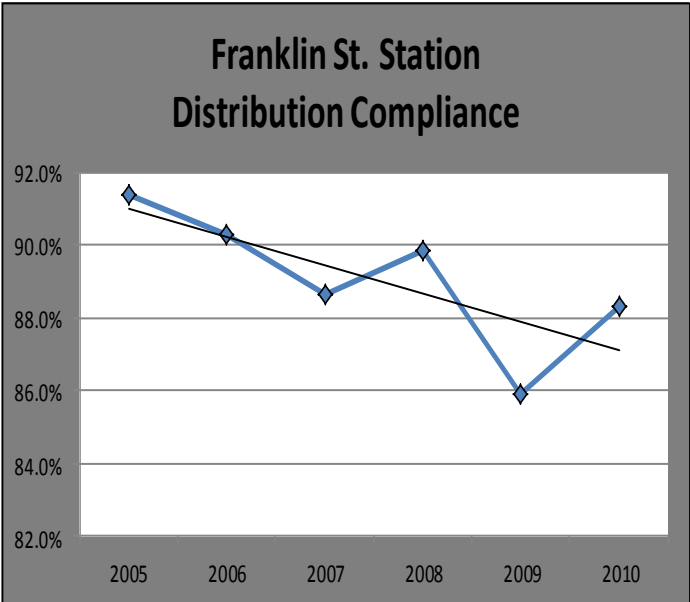
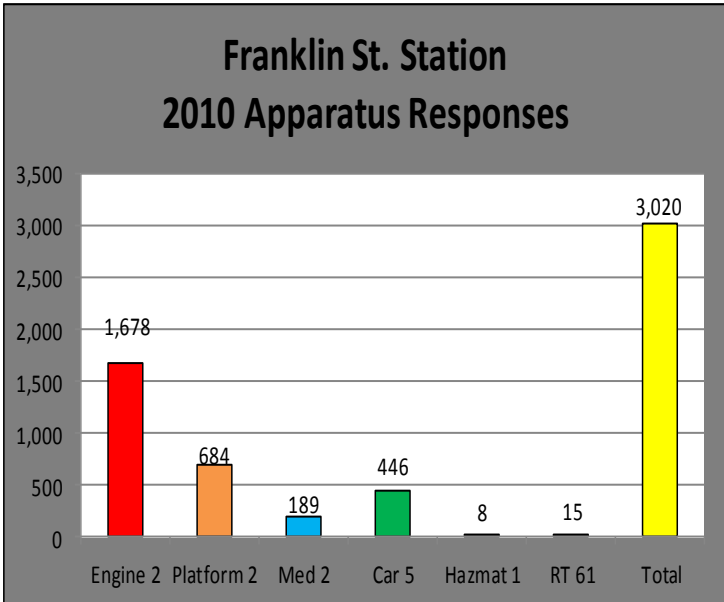
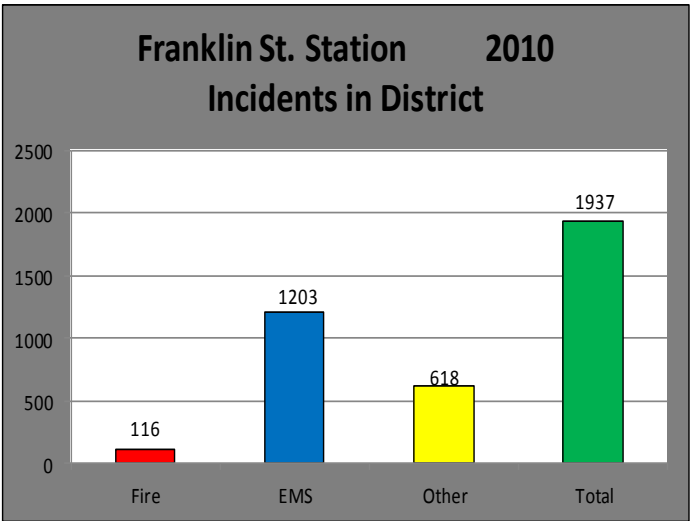
Hot Spot Map of Division Ave. Station's 2010 Incidents



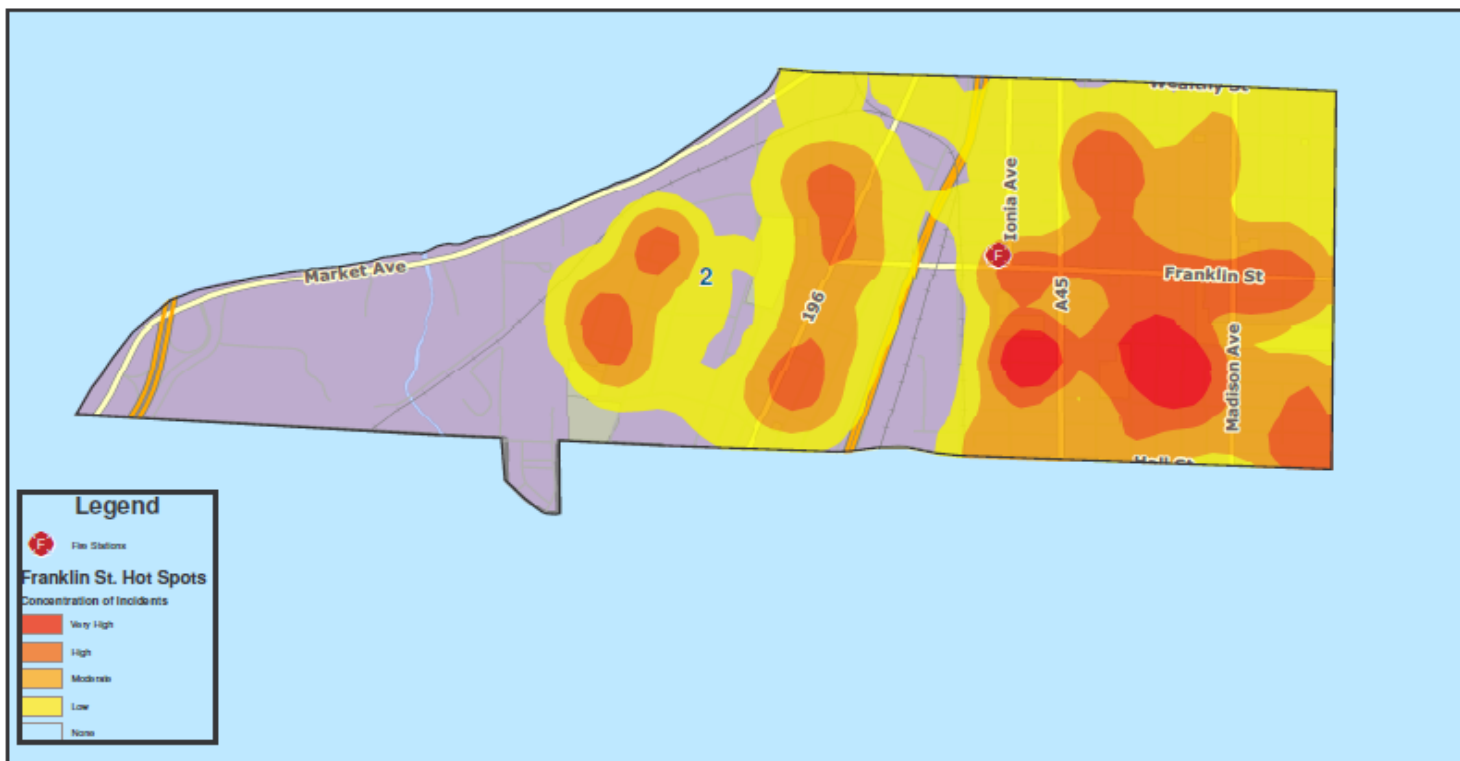
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	9	5	7	3	7	11	4	46
01:00-01:59	9	5	4	3	9	9	8	47
02:00-02:59	7	6	4	2	7	9	10	45
03:00-03:59	4	2	1	6	5	6	9	33
04:00-04:59	3	2	4	5	0	4	3	21
05:00-05:59	1	1	2	3	3	2	3	15
06:00-06:59	4	6	4	3	5	2	5	29
07:00-07:59	2	5	5	2	2	3	2	21
08:00-08:59	5	5	2	4	6	0	2	24
09:00-09:59	6	3	4	6	4	4	2	29
10:00-10:59	3	7	6	6	6	2	3	33
11:00-11:59	4	4	5	4	8	6	3	34
12:00-12:59	9	5	9	10	10	5	7	55
13:00-13:59	6	3	2	8	8	8	9	44
14:00-14:59	7	8	6	9	4	10	5	49
15:00-15:59	6	6	6	6	11	11	6	52
16:00-16:59	5	9	10	7	7	7	4	49
17:00-17:59	6	6	9	13	8	10	8	60
18:00-18:59	8	8	6	4	3	11	5	45
19:00-19:59	9	6	6	3	9	8	10	51
20:00-20:59	6	6	9	5	5	3	12	46
21:00-21:59	4	5	6	2	12	7	7	43
22:00-22:59	9	6	7	11	6	9	6	54
23:00-23:59	5	9	4	8	9	15	4	54
Total	137	128	128	133	154	162	137	979

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	0	0	0	0	0	0
01:00-01:59	1	0	0	0	1	0	1	3
02:00-02:59	1	0	0	1	0	0	0	2
03:00-03:59	0	1	0	0	0	0	1	2
04:00-04:59	0	0	0	0	1	0	0	1
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	1	0	1
08:00-08:59	0	0	0	2	0	0	0	2
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	1	0	1	0	0	2
11:00-11:59	0	0	0	0	0	0	0	0
12:00-12:59	0	0	1	0	0	0	0	1
13:00-13:59	1	0	0	0	0	0	0	1
14:00-14:59	0	0	1	0	0	2	0	3
15:00-15:59	0	1	0	0	0	1	0	2
16:00-16:59	0	0	1	1	1	1	2	6
17:00-17:59	0	0	0	0	0	0	0	0
18:00-18:59	0	0	0	0	1	0	0	1
19:00-19:59	0	1	1	0	0	1	0	3
20:00-20:59	0	0	0	0	0	1	1	2
21:00-21:59	0	0	0	0	1	1	1	3
22:00-22:59	0	0	0	1	0	0	0	1
23:00-23:59	0	0	0	0	0	0	1	1
Total	3	3	5	5	6	8	7	37

Franklin Street Fire Station



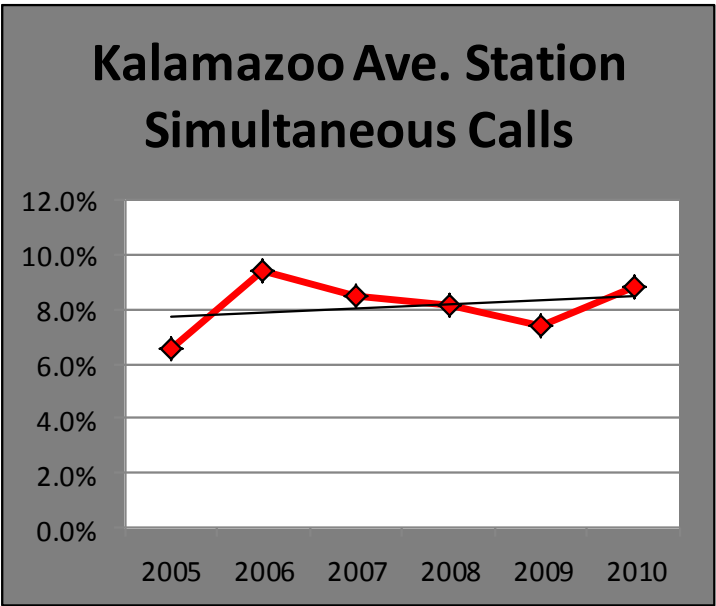
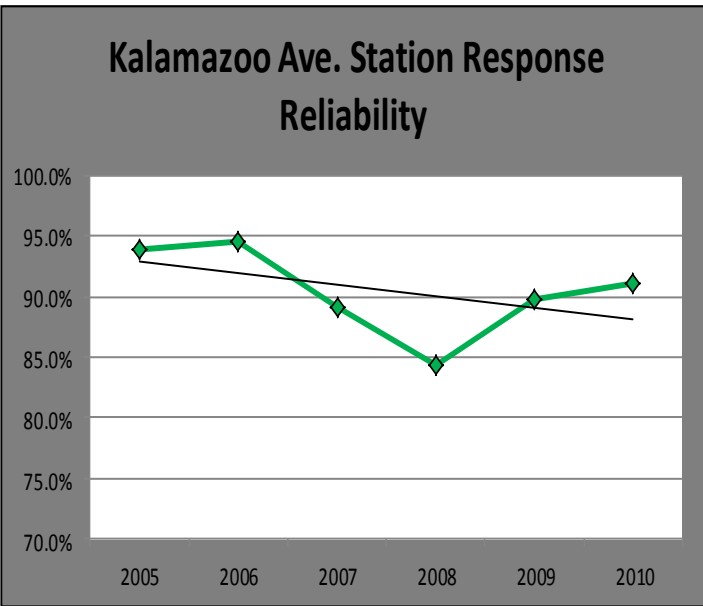
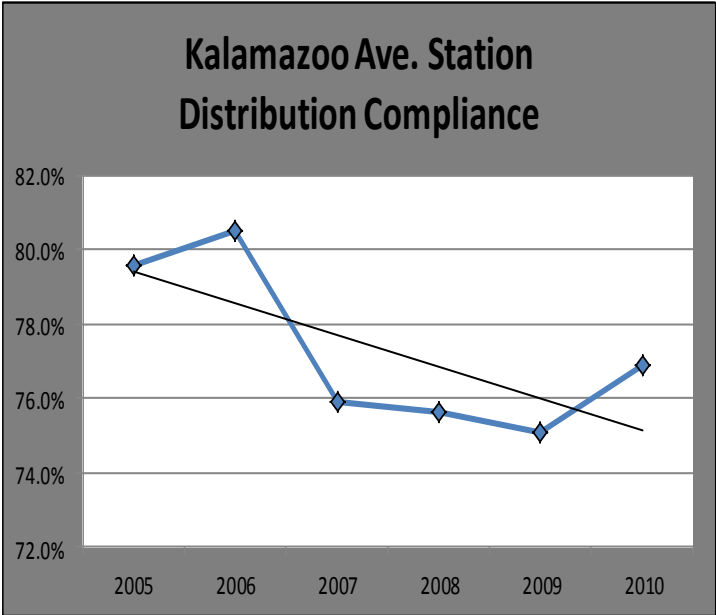
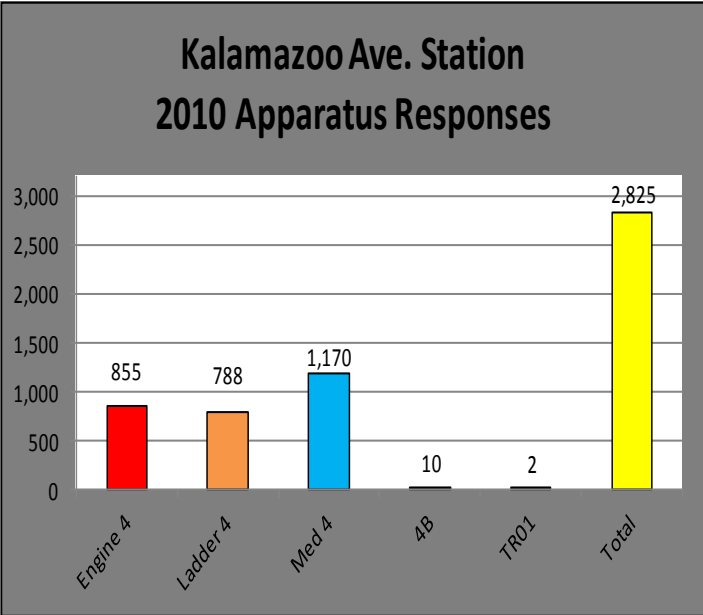
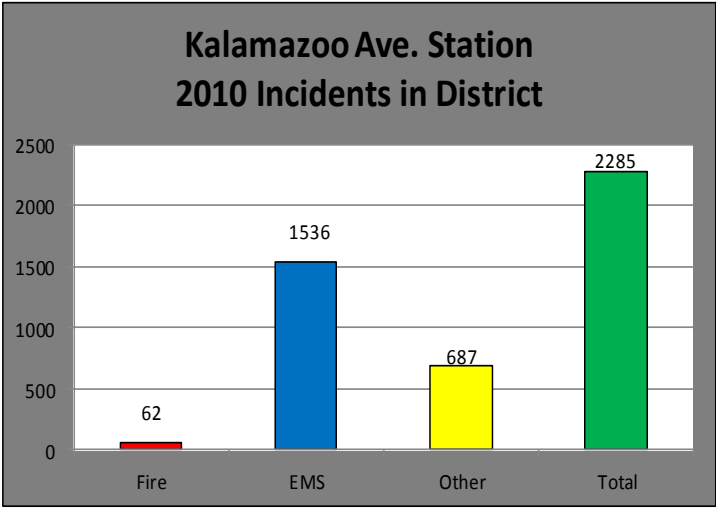
Hot Spot Map of Franklin St. Station's 2010 Incidents



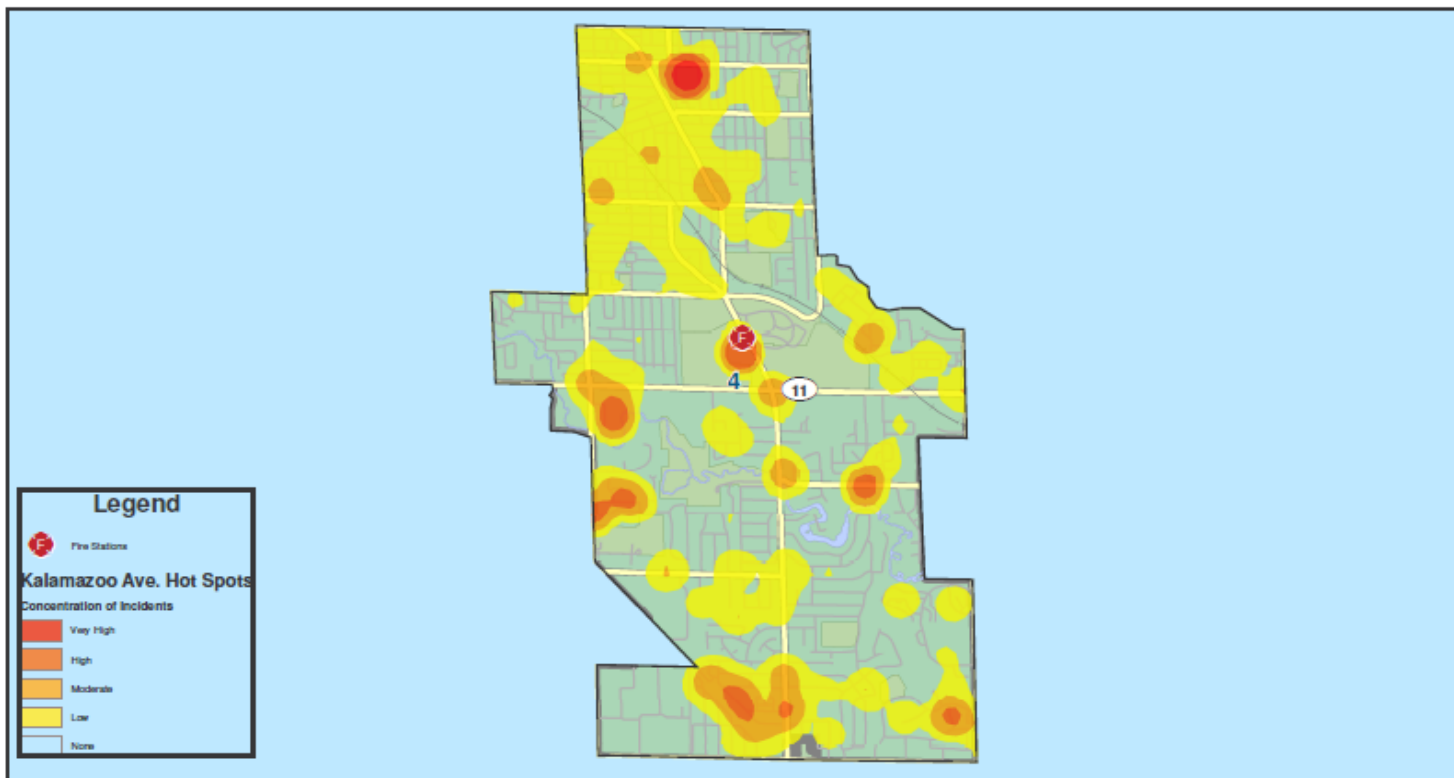
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	7	4	7	3	5	7	6	39
01:00-01:59	6	5	4	6	5	9	9	44
02:00-02:59	2	9	3	5	8	12	13	52
03:00-03:59	3	4	6	5	6	11	8	43
04:00-04:59	3	2	2	6	3	3	4	23
05:00-05:59	3	2	2	6	1	3	6	23
06:00-06:59	7	5	5	2	2	2	6	29
07:00-07:59	6	2	7	3	2	2	4	26
08:00-08:59	5	2	6	5	3	7	4	32
09:00-09:59	8	7	12	6	4	7	6	50
10:00-10:59	9	10	11	8	4	10	6	58
11:00-11:59	11	10	10	9	7	11	16	74
12:00-12:59	11	8	13	6	5	7	4	54
13:00-13:59	10	6	17	9	11	6	9	68
14:00-14:59	7	7	18	8	6	6	10	62
15:00-15:59	9	5	7	12	14	8	9	64
16:00-16:59	10	9	7	15	5	6	4	56
17:00-17:59	9	9	10	15	23	6	10	82
18:00-18:59	10	6	8	6	12	9	9	60
19:00-19:59	12	6	4	6	8	6	8	50
20:00-20:59	8	6	5	8	12	8	8	55
21:00-21:59	9	6	5	4	10	9	13	56
22:00-22:59	8	10	9	5	8	6	9	55
23:00-23:59	6	5	4	7	7	13	6	48
Total	179	145	182	165	171	174	187	1,203

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	3	0	1	1	1	1	0	7
01:00-01:59	1	0	0	0	0	0	0	1
02:00-02:59	1	0	1	0	0	0	0	2
03:00-03:59	0	0	0	0	3	1	1	5
04:00-04:59	0	0	1	1	0	0	1	3
05:00-05:59	0	1	0	0	0	0	0	1
06:00-06:59	0	1	0	1	1	0	0	3
07:00-07:59	0	0	1	0	0	0	1	2
08:00-08:59	0	0	0	0	1	0	1	2
09:00-09:59	1	0	1	0	0	0	0	2
10:00-10:59	0	1	1	0	0	0	1	3
11:00-11:59	0	0	0	2	1	1	1	5
12:00-12:59	1	2	1	1	1	1	0	7
13:00-13:59	0	1	0	1	2	2	0	6
14:00-14:59	0	3	1	1	1	2	2	10
15:00-15:59	5	0	0	1	2	1	0	9
16:00-16:59	0	0	1	0	2	1	1	5
17:00-17:59	1	0	1	0	0	2	1	5
18:00-18:59	0	1	1	1	1	0	1	5
19:00-19:59	0	2	1	1	0	1	2	7
20:00-20:59	2	0	1	1	1	0	4	9
21:00-21:59	1	0	1	2	1	0	3	8
22:00-22:59	1	1	0	0	2	1	0	5
23:00-23:59	0	1	1	1	0	1	0	4
Total	17	14	15	15	20	15	20	116

Kalamazoo Avenue Fire Station



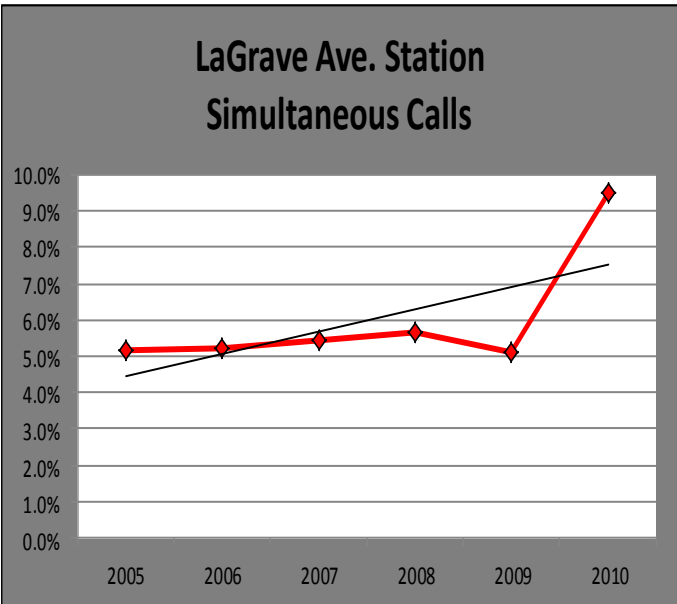
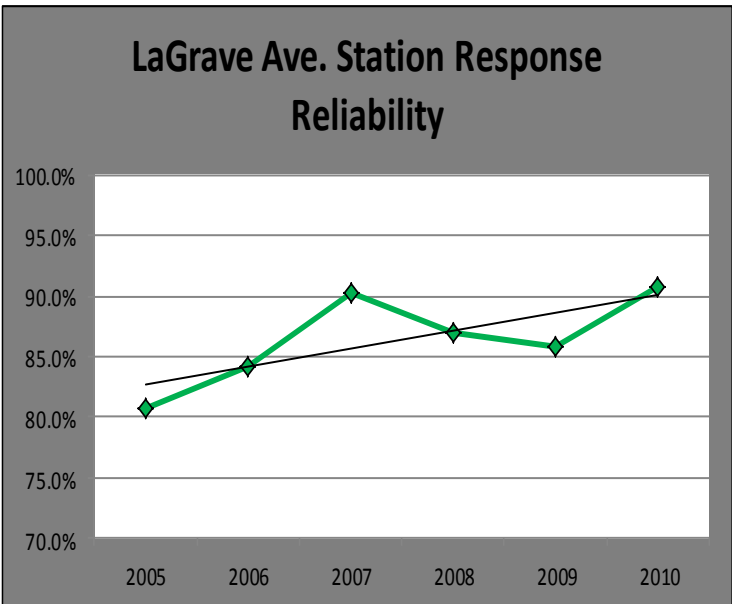
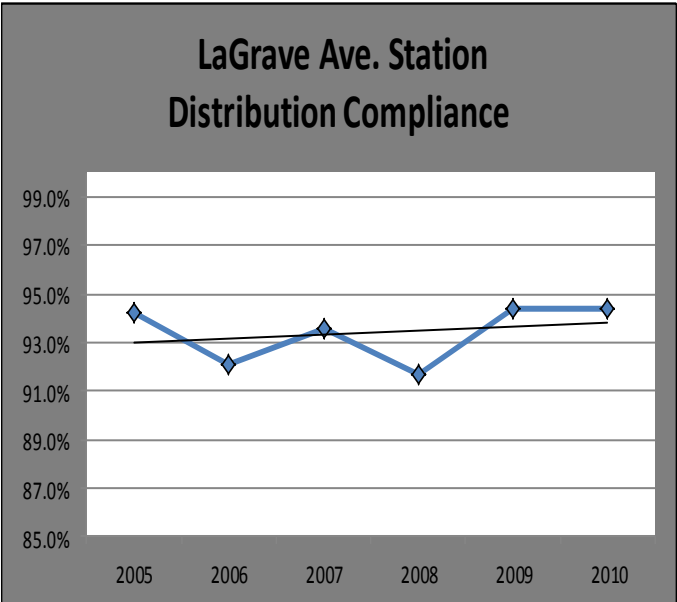
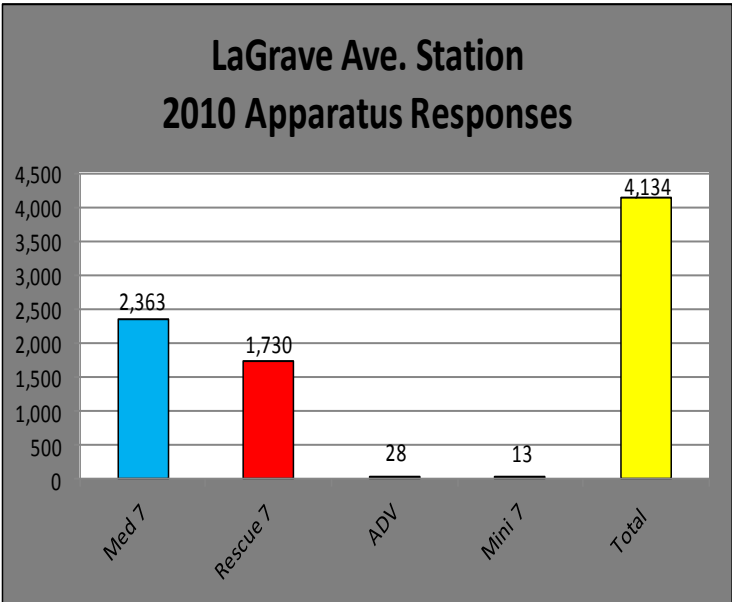
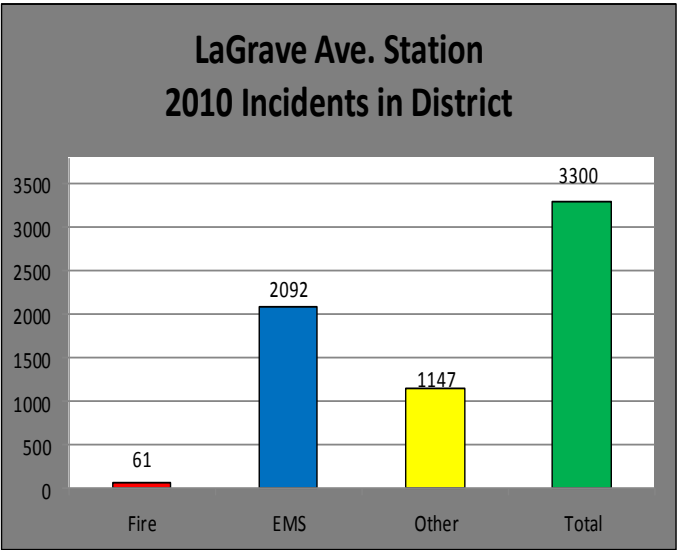
Hot Spot Map of Kalamazoo Ave. Station's 2010 Incidents



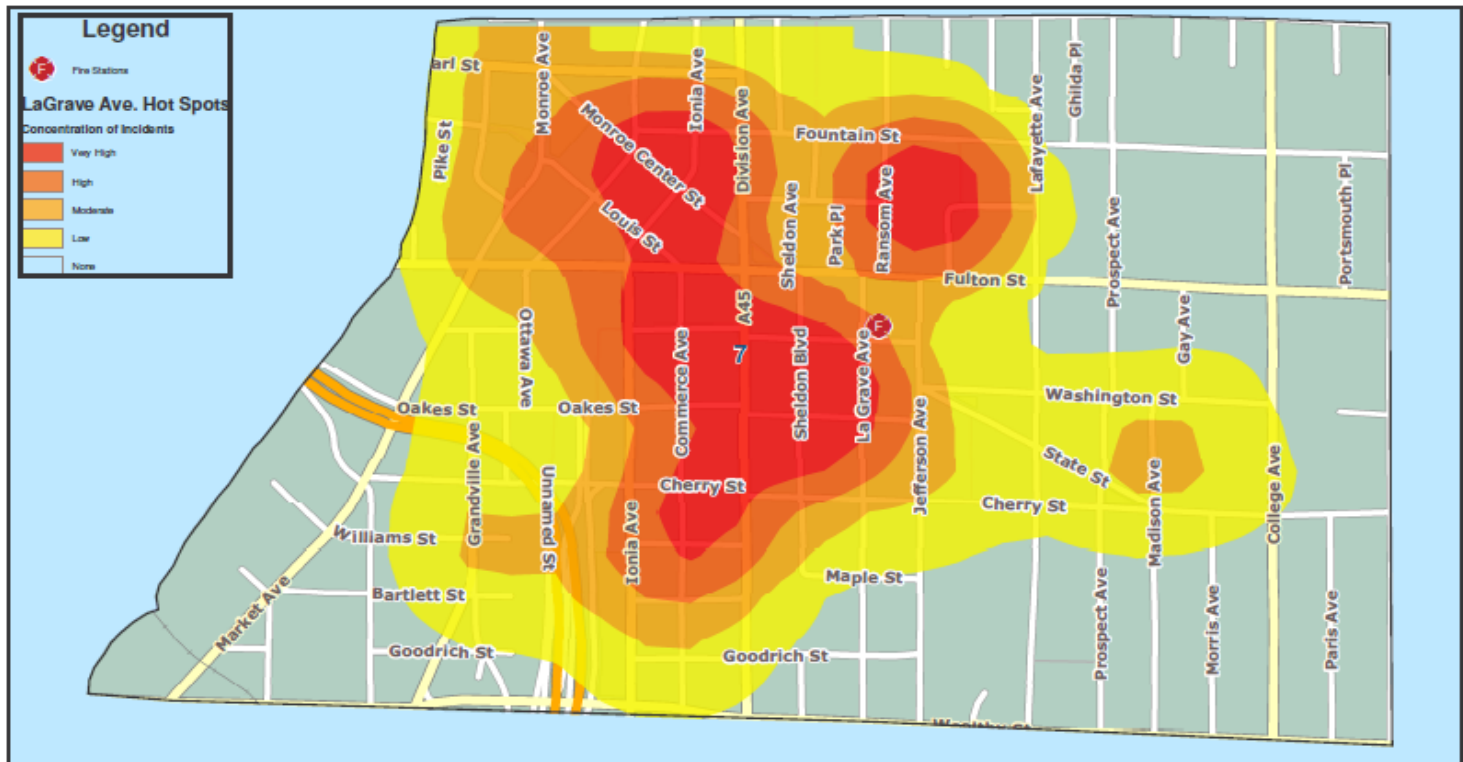
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	12	5	10	4	9	9	9	58
01:00-01:59	6	8	6	5	7	10	6	48
02:00-02:59	5	7	7	5	6	7	10	47
03:00-03:59	7	7	4	5	4	6	7	40
04:00-04:59	3	7	5	5	11	6	10	47
05:00-05:59	7	4	4	6	0	6	5	32
06:00-06:59	12	9	4	8	8	3	3	47
07:00-07:59	8	6	6	10	7	4	3	44
08:00-08:59	16	11	7	8	7	5	6	60
09:00-09:59	9	14	7	11	11	10	9	71
10:00-10:59	14	11	14	7	6	12	12	76
11:00-11:59	6	11	8	14	14	6	15	74
12:00-12:59	10	10	16	10	14	9	9	78
13:00-13:59	7	13	8	15	11	13	12	79
14:00-14:59	9	12	13	10	10	8	9	71
15:00-15:59	8	9	8	15	11	7	8	66
16:00-16:59	8	11	15	8	11	10	14	77
17:00-17:59	14	10	17	16	7	11	13	88
18:00-18:59	8	14	10	14	10	14	7	77
19:00-19:59	6	8	9	9	15	13	13	73
20:00-20:59	10	8	13	8	9	8	16	72
21:00-21:59	20	10	10	12	16	10	5	83
22:00-22:59	6	15	9	7	12	12	13	74
23:00-23:59	3	13	8	9	4	10	7	54
Total	214	233	218	221	220	209	221	1,536

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	0	1	0	0	0	1
01:00-01:59	0	1	0	0	1	0	0	2
02:00-02:59	0	0	0	1	2	0	0	3
03:00-03:59	0	0	0	0	1	0	2	3
04:00-04:59	0	1	0	1	1	0	0	3
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	1	0	1	0	2
08:00-08:59	0	0	0	1	0	1	0	2
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	1	0	0	1	0	2	0	4
11:00-11:59	0	1	0	1	1	0	0	3
12:00-12:59	0	0	0	1	0	0	0	1
13:00-13:59	0	0	0	0	0	0	0	0
14:00-14:59	1	3	0	2	0	0	0	6
15:00-15:59	0	1	1	0	2	1	0	5
16:00-16:59	1	2	0	2	0	0	0	5
17:00-17:59	0	1	0	1	1	0	1	4
18:00-18:59	1	1	1	0	0	0	0	3
19:00-19:59	1	1	0	0	0	1	0	3
20:00-20:59	0	1	0	2	3	0	0	6
21:00-21:59	0	0	0	2	0	0	1	3
22:00-22:59	0	0	1	0	0	0	1	2
23:00-23:59	1	0	0	0	0	0	0	1
Total	6	13	3	17	12	6	5	62

LaGrave Avenue Fire Station



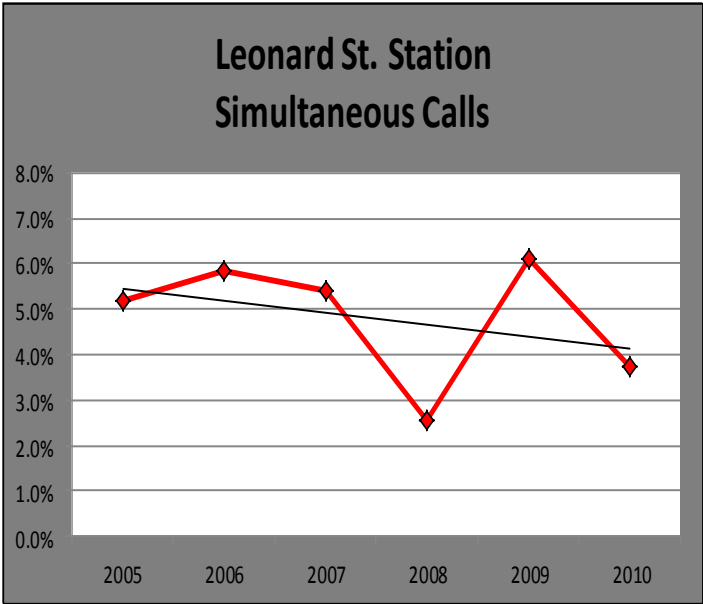
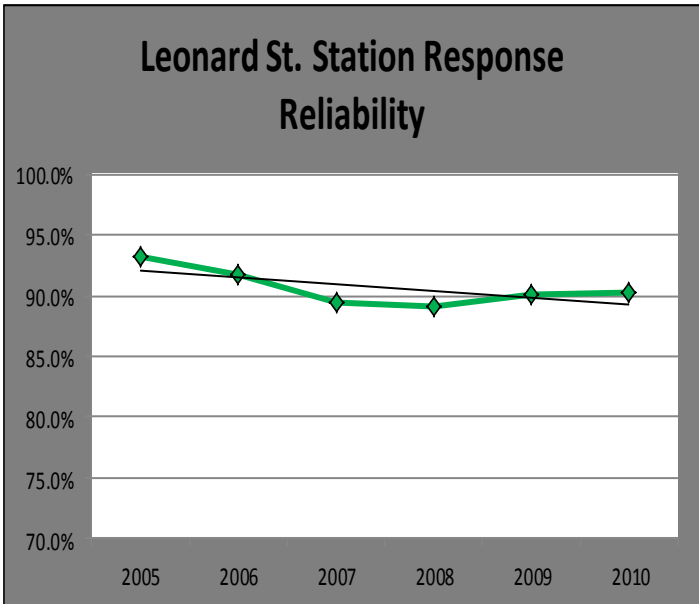
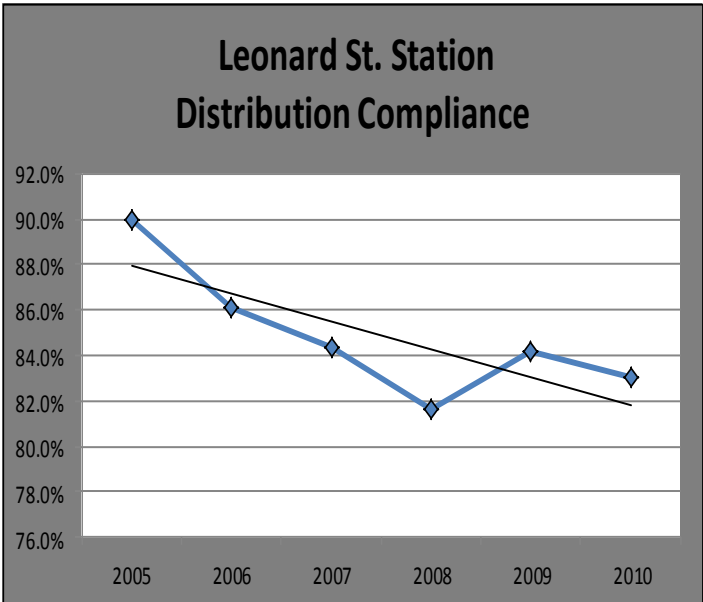
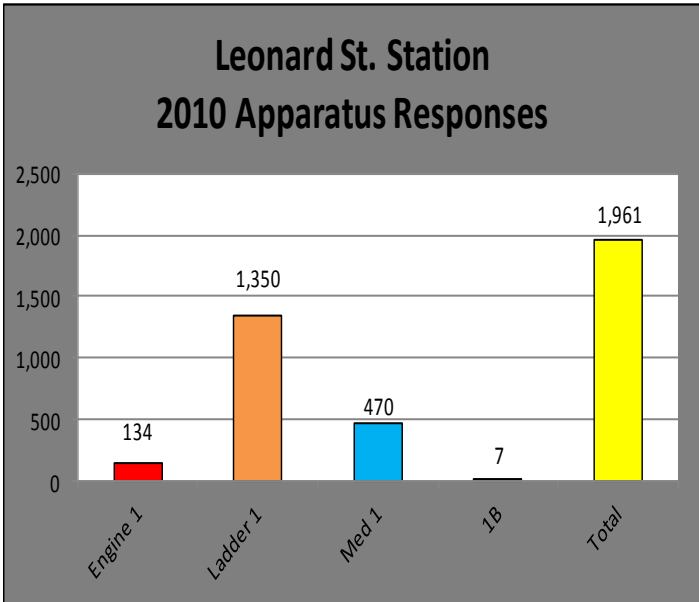
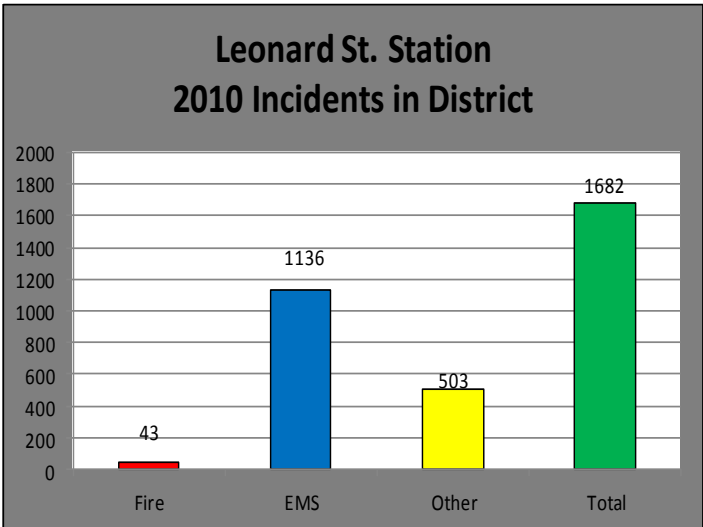
Hot Spot Map of LaGrave Ave. Station's 2010 Incidents



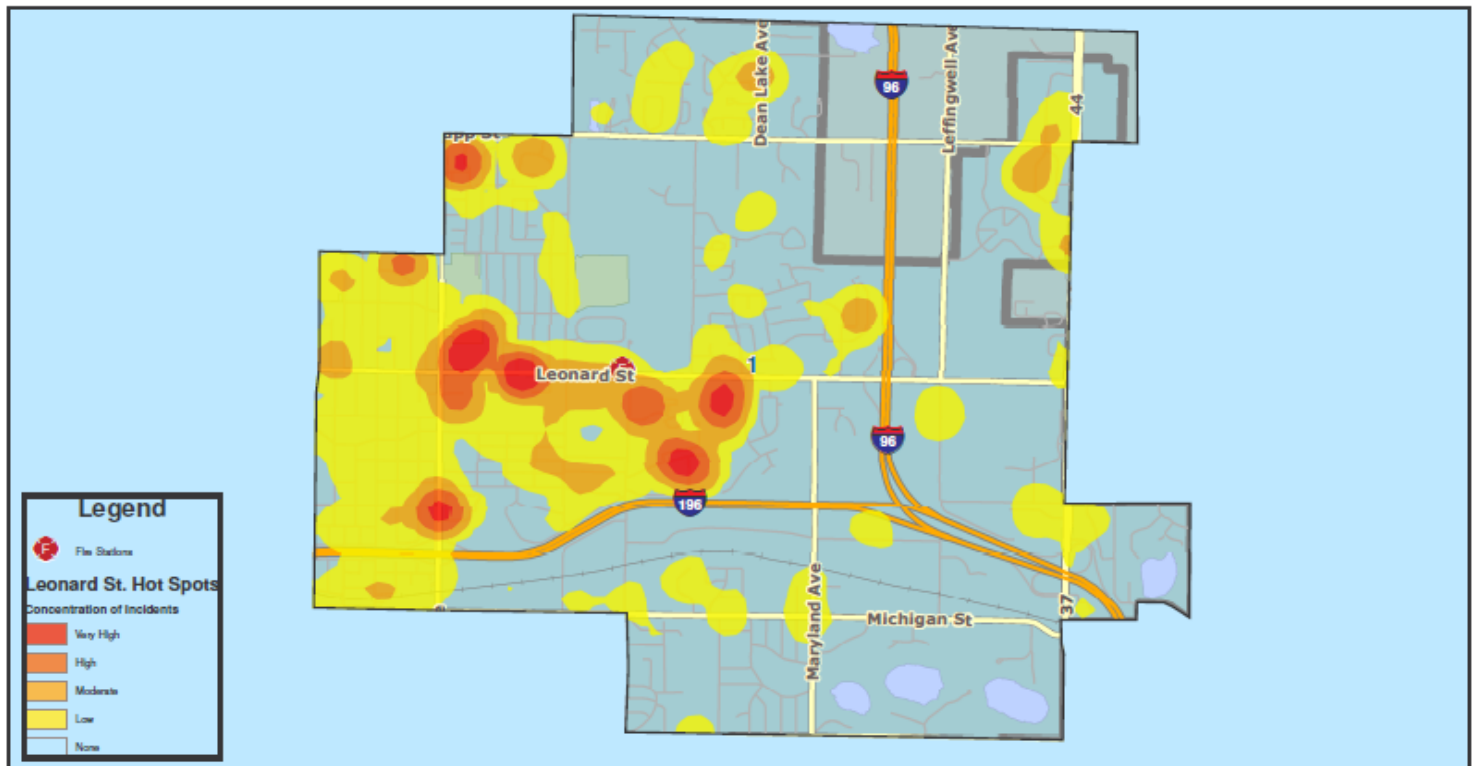
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	7	6	12	6	8	19	10	68
01:00-01:59	8	7	8	6	9	17	22	77
02:00-02:59	10	9	7	6	11	15	17	75
03:00-03:59	8	7	7	3	6	12	9	52
04:00-04:59	1	3	2	7	7	5	5	30
05:00-05:59	5	3	4	5	5	4	2	28
06:00-06:59	6	4	5	11	4	5	7	42
07:00-07:59	10	2	8	4	3	4	2	33
08:00-08:59	4	10	10	14	7	2	3	50
09:00-09:59	9	7	10	23	8	10	8	75
10:00-10:59	13	13	13	12	16	9	8	84
11:00-11:59	12	24	20	16	26	8	6	112
12:00-12:59	20	18	19	22	12	9	10	110
13:00-13:59	19	17	18	17	16	8	6	101
14:00-14:59	20	17	19	23	20	20	20	139
15:00-15:59	23	18	25	14	18	12	15	125
16:00-16:59	17	28	17	19	18	8	11	118
17:00-17:59	21	20	19	17	23	18	16	134
18:00-18:59	13	20	20	18	29	9	16	125
19:00-19:59	11	11	18	14	22	15	15	106
20:00-20:59	12	14	19	14	18	17	13	107
21:00-21:59	13	12	21	17	16	16	15	110
22:00-22:59	14	20	20	12	14	15	13	108
23:00-23:59	9	14	10	11	19	16	4	83
Total	285	304	331	311	335	273	253	2,092

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	1	0	1	0	0	0	2
01:00-01:59	1	0	0	0	0	3	0	4
02:00-02:59	0	0	0	0	0	0	1	1
03:00-03:59	0	0	0	0	0	1	0	1
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	1	0	0	0	1
06:00-06:59	0	0	1	0	0	1	0	2
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	1	0	0	1	0	0	0	2
09:00-09:59	0	0	0	0	0	1	0	1
10:00-10:59	0	0	0	1	0	0	1	2
11:00-11:59	1	0	0	0	0	0	0	1
12:00-12:59	0	0	1	1	2	2	0	6
13:00-13:59	0	1	0	3	0	0	0	4
14:00-14:59	1	0	0	0	0	0	1	2
15:00-15:59	1	0	0	2	0	0	0	3
16:00-16:59	0	1	1	0	1	1	0	4
17:00-17:59	0	0	0	2	0	1	1	4
18:00-18:59	1	0	5	0	1	1	0	8
19:00-19:59	0	1	0	0	0	0	1	2
20:00-20:59	0	0	1	0	0	0	2	3
21:00-21:59	0	0	1	2	0	0	0	3
22:00-22:59	1	2	0	0	1	0	0	4
23:00-23:59	0	0	1	0	0	0	0	1
Total	7	6	11	14	5	11	7	61

Leonard Street Fire Station



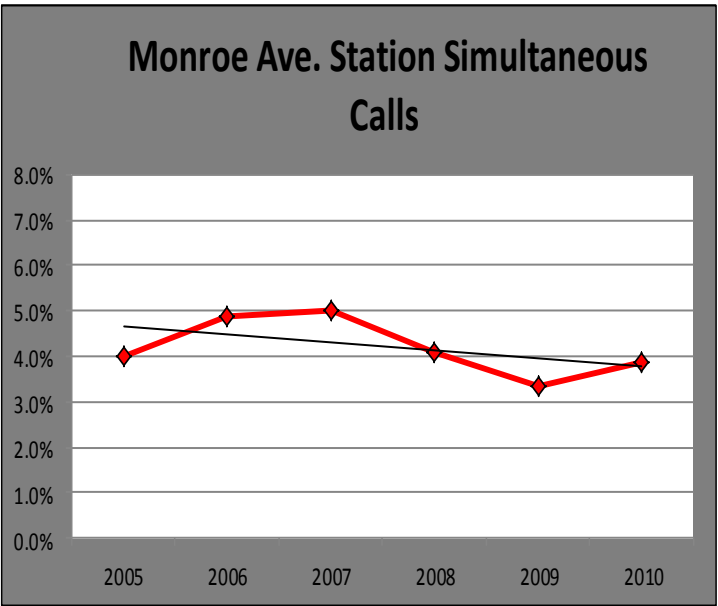
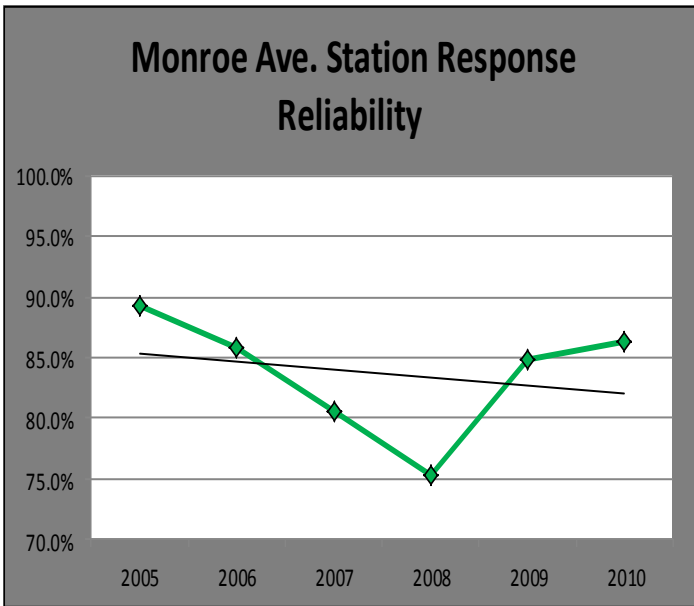
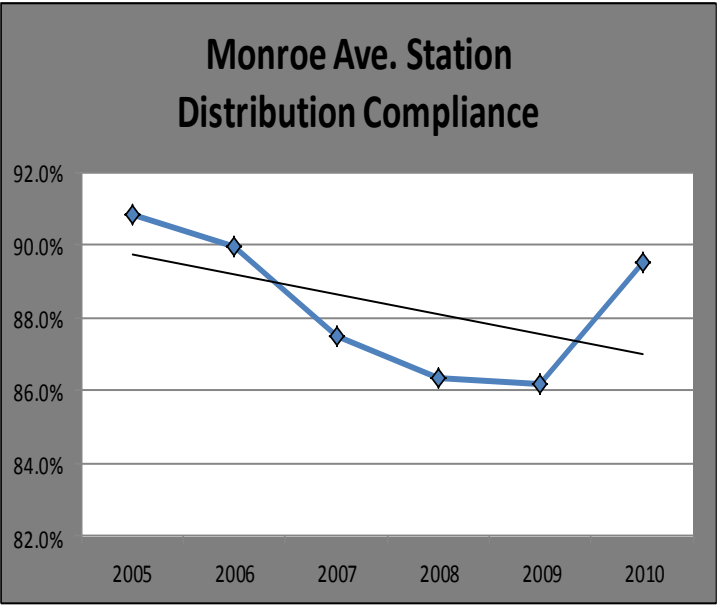
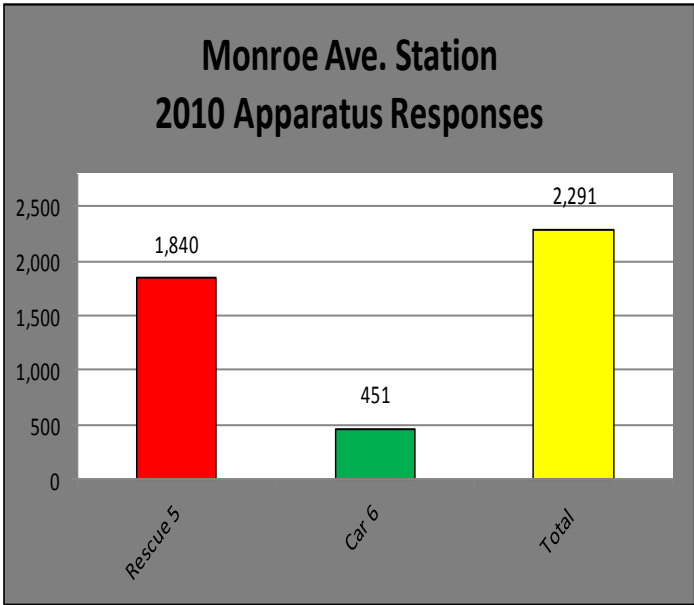
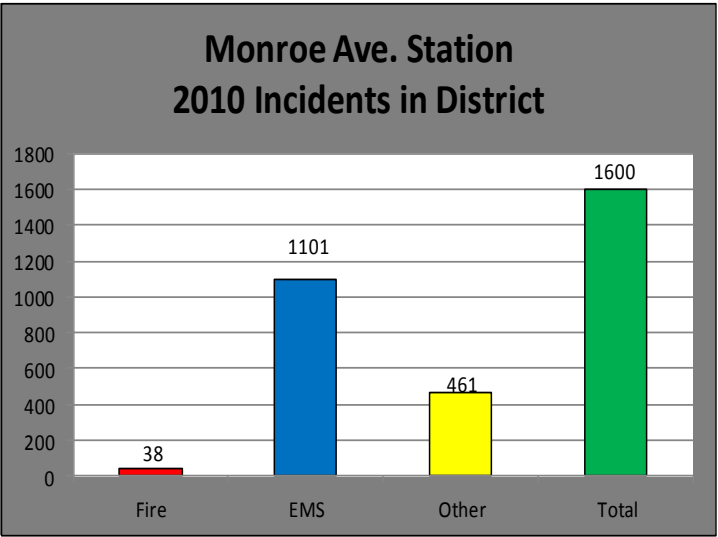
Hot Spot Map of Leonard St. Station's 2010 Incidents



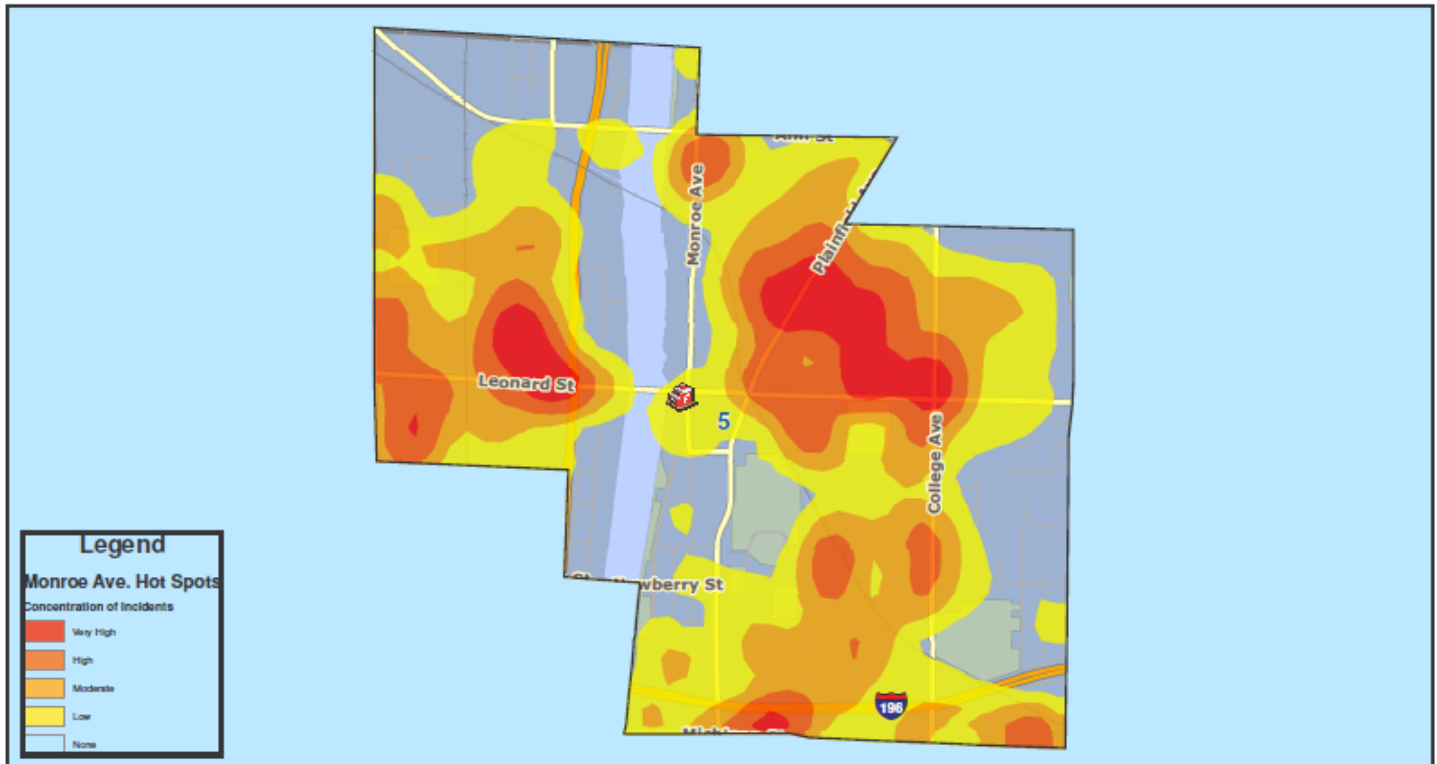
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	7	3	5	0	7	7	4	33
01:00-01:59	8	6	3	4	3	3	3	30
02:00-02:59	4	2	6	4	4	4	4	28
03:00-03:59	5	2	4	0	1	4	6	22
04:00-04:59	7	3	3	6	3	2	3	27
05:00-05:59	3	2	6	1	2	4	3	21
06:00-06:59	7	2	4	3	3	1	3	23
07:00-07:59	3	2	5	8	10	3	2	33
08:00-08:59	9	9	6	10	8	3	4	49
09:00-09:59	12	7	15	11	8	9	4	66
10:00-10:59	9	13	5	10	6	4	5	52
11:00-11:59	5	7	7	9	9	8	4	49
12:00-12:59	11	7	12	16	17	14	10	87
13:00-13:59	11	11	8	15	13	6	8	72
14:00-14:59	9	9	7	10	7	6	4	52
15:00-15:59	9	5	11	4	8	7	5	49
16:00-16:59	7	12	11	12	7	6	8	63
17:00-17:59	4	6	12	6	8	7	14	57
18:00-18:59	8	9	8	10	10	13	4	62
19:00-19:59	6	9	10	8	11	7	7	58
20:00-20:59	12	7	7	4	7	10	7	54
21:00-21:59	4	9	7	6	9	6	4	45
22:00-22:59	5	12	10	10	15	7	9	68
23:00-23:59	5	4	3	4	7	9	4	36
Total	170	158	175	171	183	150	129	1,136

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	1	0	0	0	1	2
01:00-01:59	2	1	0	0	0	1	0	4
02:00-02:59	1	0	0	1	0	0	0	2
03:00-03:59	0	0	0	0	1	1	0	2
04:00-04:59	0	1	0	0	0	0	0	1
05:00-05:59	1	1	0	0	1	0	0	3
06:00-06:59	0	1	0	1	0	0	0	2
07:00-07:59	0	0	1	1	0	1	0	3
08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	0	0	0	0	0	0
11:00-11:59	0	1	0	0	0	1	0	2
12:00-12:59	0	0	1	0	0	0	1	2
13:00-13:59	0	1	1	0	0	0	0	2
14:00-14:59	0	0	0	0	1	0	0	1
15:00-15:59	0	0	1	0	2	1	0	4
16:00-16:59	0	1	1	0	0	2	0	4
17:00-17:59	0	0	2	0	0	1	0	3
18:00-18:59	0	0	0	0	0	0	1	1
19:00-19:59	2	0	0	0	0	0	0	2
20:00-20:59	0	0	0	0	0	0	1	1
21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	1	0	1
23:00-23:59	0	1	0	0	0	0	0	1
Total	6	8	8	3	5	9	4	43

Monroe Avenue Fire Station



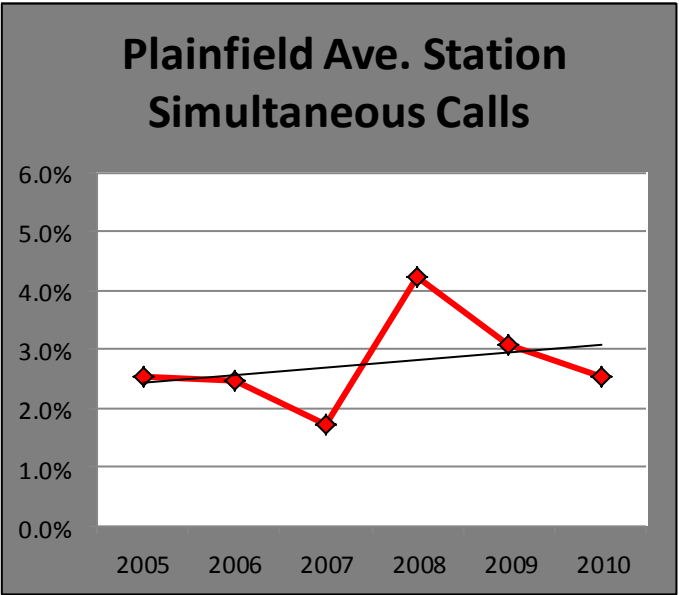
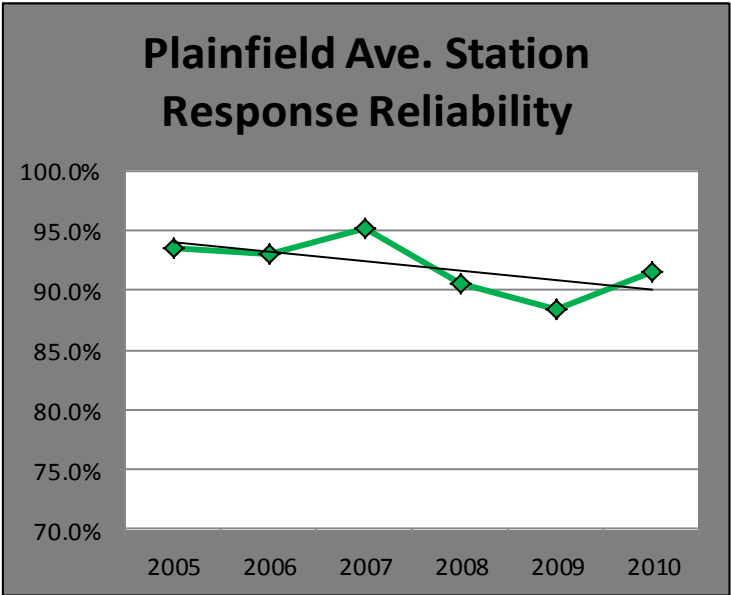
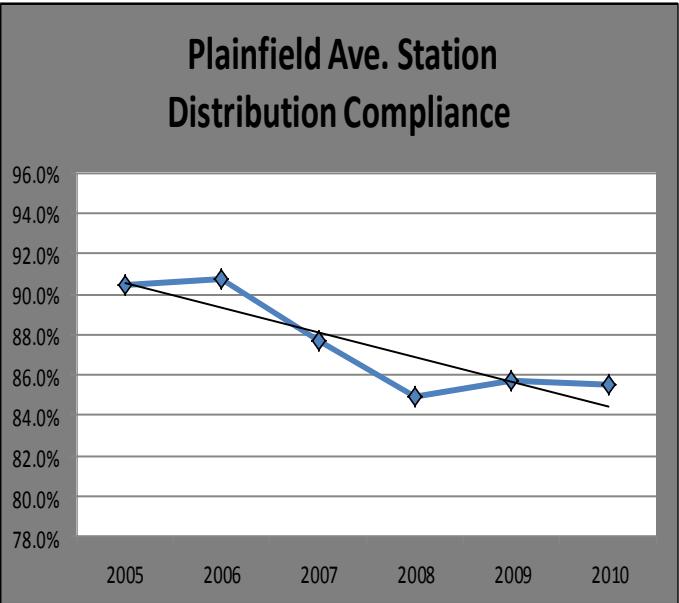
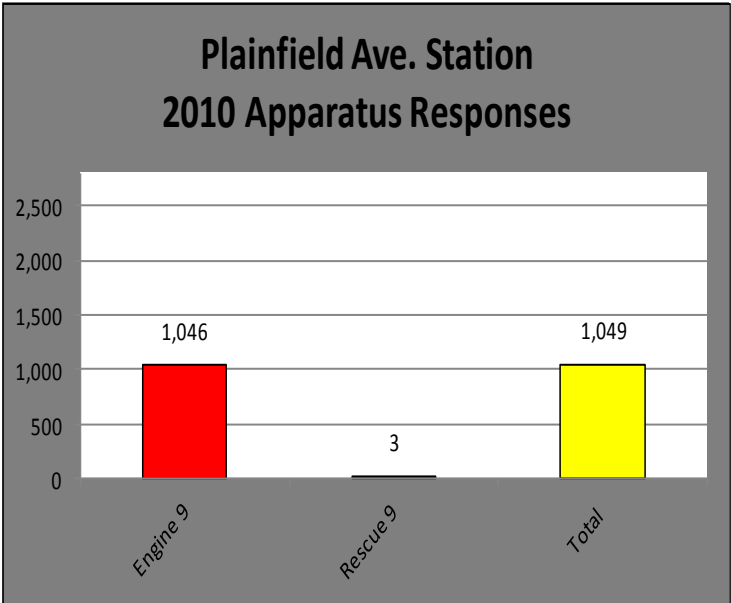
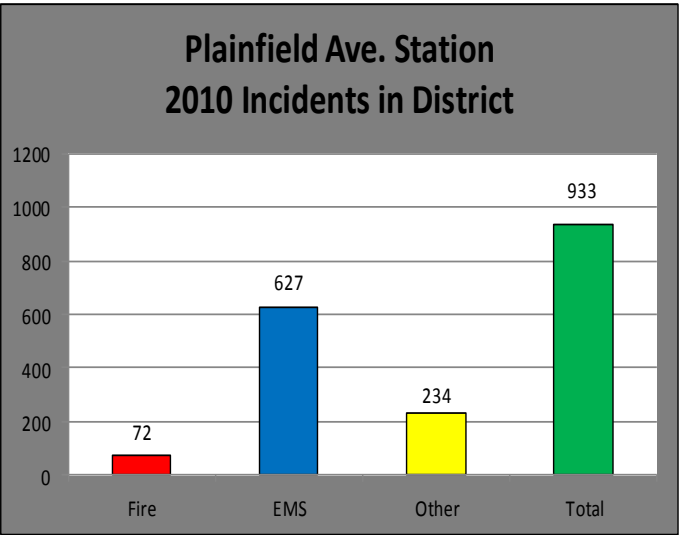
Hot Spot Map of Monroe Ave. Station's 2010 Incidents



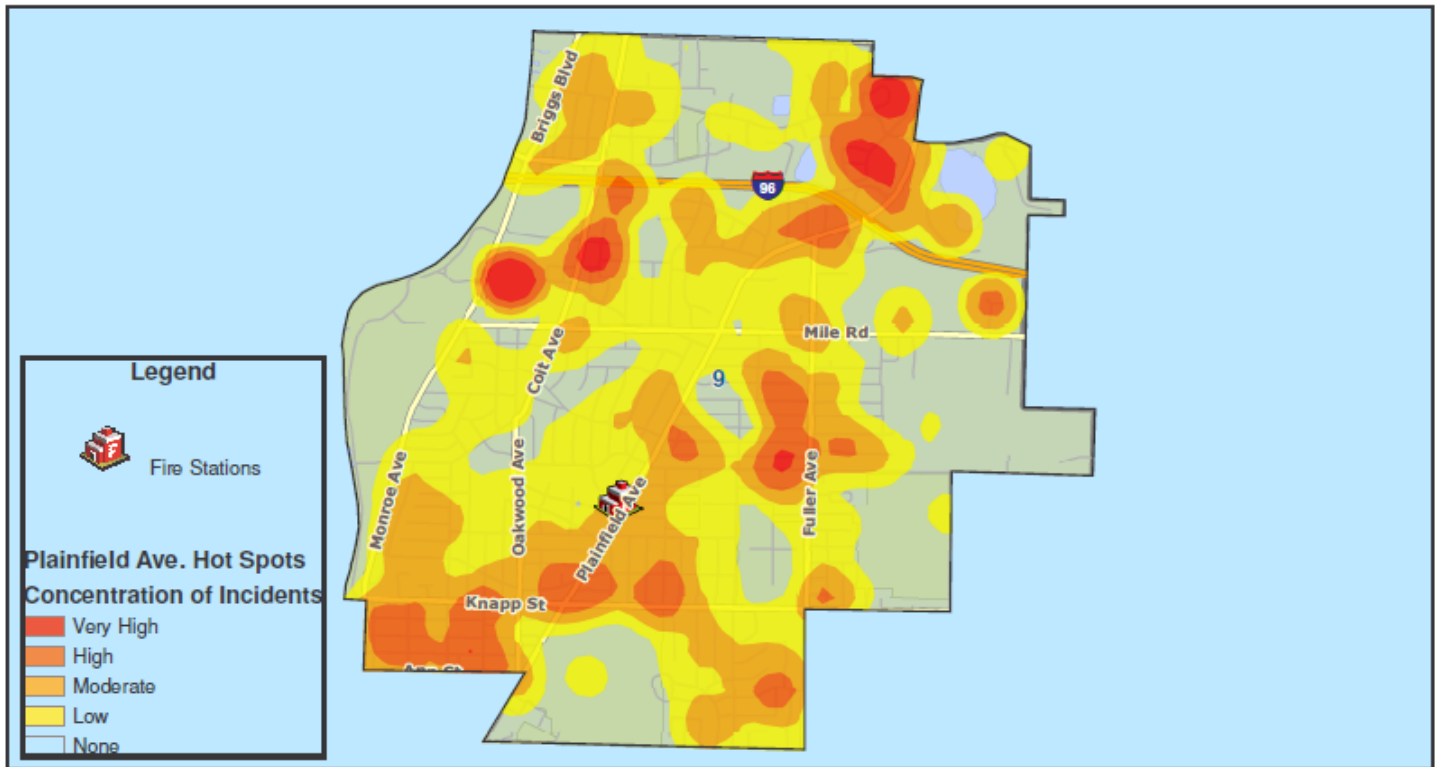
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	5	4	6	5	9	6	6	41
01:00-01:59	2	7	7	3	4	6	4	33
02:00-02:59	10	4	9	5	4	6	12	50
03:00-03:59	6	2	1	8	3	7	7	34
04:00-04:59	1	1	4	4	8	6	2	26
05:00-05:59	2	1	4	6	4	5	5	27
06:00-06:59	1	4	4	3	5	2	5	24
07:00-07:59	6	3	5	2	3	2	9	30
08:00-08:59	6	1	5	5	4	4	6	31
09:00-09:59	7	4	4	7	3	2	9	36
10:00-10:59	4	9	7	5	4	2	5	36
11:00-11:59	6	11	3	11	8	8	5	52
12:00-12:59	5	11	6	5	11	8	11	57
13:00-13:59	4	1	10	6	10	9	11	51
14:00-14:59	8	3	13	7	10	13	4	58
15:00-15:59	10	6	8	8	14	9	8	63
16:00-16:59	6	7	8	13	12	6	11	63
17:00-17:59	7	6	11	6	6	17	8	61
18:00-18:59	9	10	9	7	12	9	8	64
19:00-19:59	5	7	7	8	10	11	6	54
20:00-20:59	6	4	11	4	7	8	8	48
21:00-21:59	5	6	13	7	10	7	2	50
22:00-22:59	7	5	8	9	10	5	14	58
23:00-23:59	9	6	9	7	8	8	7	54
Total	137	123	172	151	179	166	173	1,101

Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	0	1	0	0	0	1
01:00-01:59	1	0	1	0	0	1	0	3
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	2	0	0	2
06:00-06:59	1	0	0	0	0	0	0	1
07:00-07:59	0	0	0	0	0	1	0	1
08:00-08:59	0	0	0	0	0	1	0	1
09:00-09:59	1	0	0	0	1	0	1	3
10:00-10:59	0	0	0	0	0	0	0	0
11:00-11:59	0	0	3	0	0	0	0	3
12:00-12:59	0	1	0	0	0	0	0	1
13:00-13:59	0	0	0	0	0	0	0	0
14:00-14:59	0	1	0	1	1	0	0	3
15:00-15:59	1	0	0	0	0	0	0	1
16:00-16:59	0	1	0	0	0	0	0	1
17:00-17:59	0	0	1	0	0	0	1	2
18:00-18:59	0	1	0	0	0	0	0	1
19:00-19:59	0	0	0	1	0	0	0	1
20:00-20:59	2	0	0	0	1	0	0	3
21:00-21:59	2	0	0	0	0	0	0	2
22:00-22:59	0	1	1	1	1	0	1	5
23:00-23:59	0	0	0	1	0	2	0	3
Total	8	5	6	5	6	5	3	38

Plainfield Avenue Fire Station



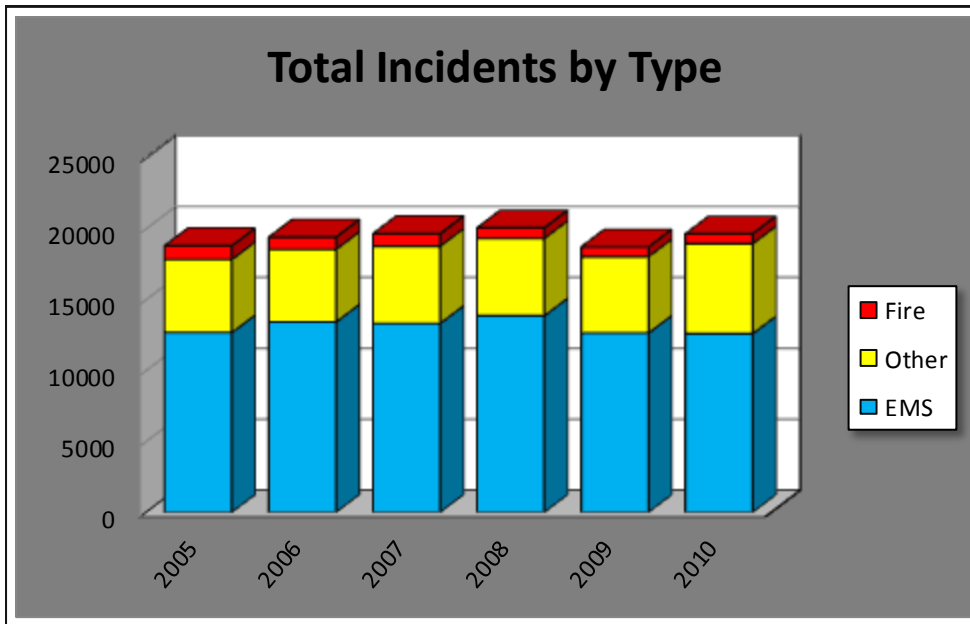
Hot Spot Map of Plainfield Ave. Station's 2010 Incidents



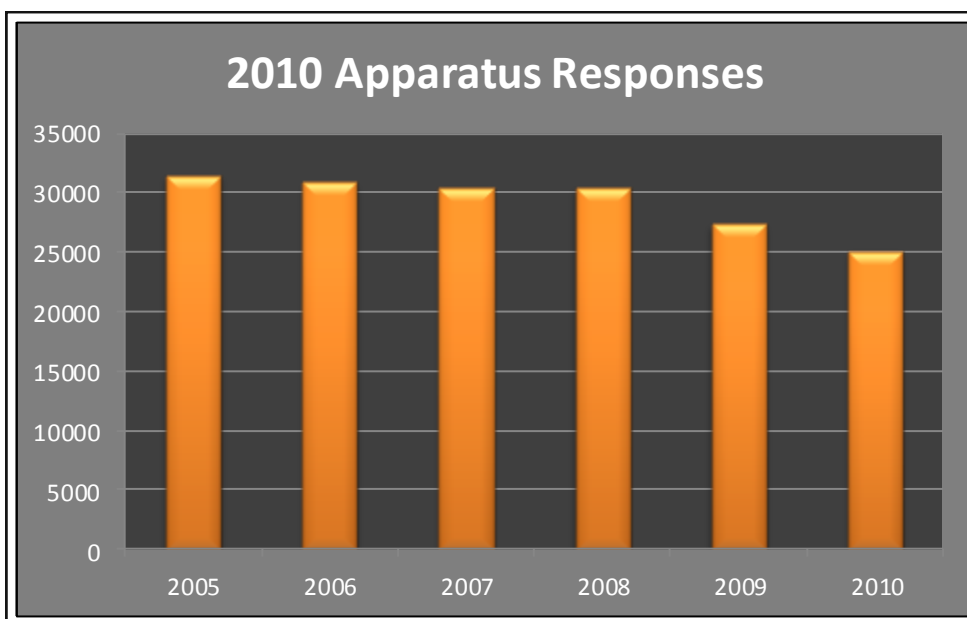
Temporal Analysis								
2010-EMS	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	5	2	4	7	4	3	2	27
01:00-01:59	4	2	0	1	1	3	6	17
02:00-02:59	2	0	2	1	0	5	6	16
03:00-03:59	2	2	0	2	2	6	4	18
04:00-04:59	4	3	1	3	1	2	1	15
05:00-05:59	1	4	4	1	2	3	2	17
06:00-06:59	3	4	1	3	2	2	3	18
07:00-07:59	7	5	7	3	5	1	2	30
08:00-08:59	5	3	1	3	5	6	1	24
09:00-09:59	5	3	3	7	7	2	5	32
10:00-10:59	6	2	3	4	2	7	7	31
11:00-11:59	2	5	2	0	4	5	8	26
12:00-12:59	5	6	4	4	6	2	4	31
13:00-13:59	2	6	3	6	7	1	3	28
14:00-14:59	6	5	4	6	6	5	10	42
15:00-15:59	3	3	1	3	10	6	4	30
16:00-16:59	5	4	6	4	6	2	3	30
17:00-17:59	7	6	3	3	6	3	8	36
18:00-18:59	4	5	4	8	5	4	3	33
19:00-19:59	5	2	7	5	2	5	3	29
20:00-20:59	6	2	3	1	5	3	2	22
21:00-21:59	4	6	4	2	5	6	2	29
22:00-22:59	3	4	1	4	9	2	0	23
23:00-23:59	3	3	3	3	4	3	4	23
Total	99	87	71	84	106	87	93	627

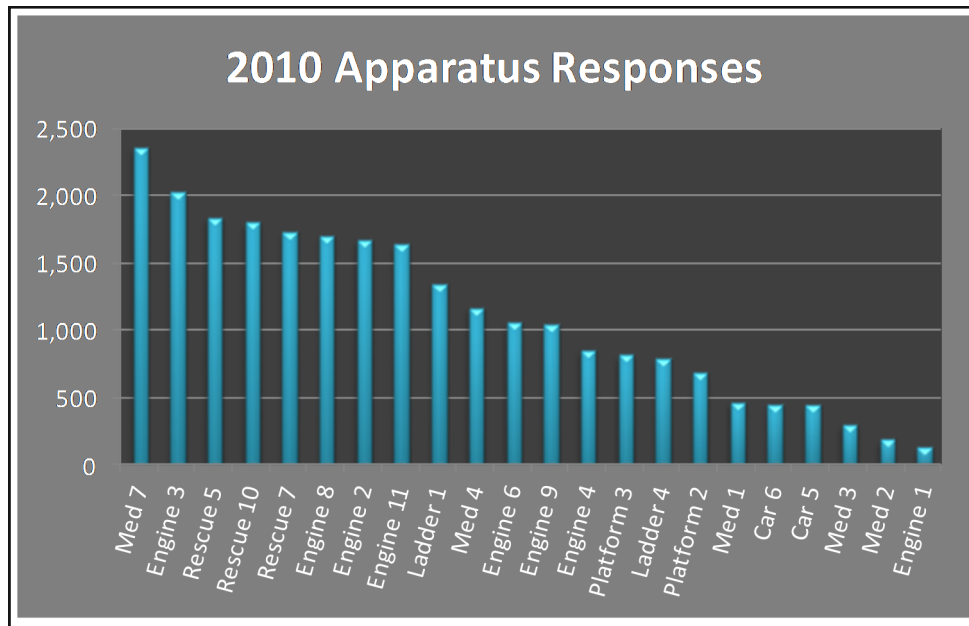
Temporal Analysis								
2010-Fires	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	1	0	0	0	0	1	0	2
01:00-01:59	0	0	1	0	0	0	0	1
02:00-02:59	1	3	0	0	0	1	0	5
03:00-03:59	2	1	0	0	1	0	0	4
04:00-04:59	1	0	0	0	0	1	0	2
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	0	1	0	0	0	0	0	1
08:00-08:59	0	0	1	0	0	0	0	1
09:00-09:59	0	3	1	1	0	0	0	5
10:00-10:59	2	0	0	0	0	1	0	3
11:00-11:59	1	1	0	0	1	0	0	3
12:00-12:59	0	1	0	0	0	0	0	1
13:00-13:59	0	0	0	1	0	0	1	2
14:00-14:59	0	0	1	0	3	0	0	4
15:00-15:59	0	1	0	0	1	1	0	3
16:00-16:59	2	0	0	0	2	1	0	5
17:00-17:59	0	0	0	0	2	1	0	3
18:00-18:59	2	1	0	0	1	2	0	6
19:00-19:59	0	0	1	0	0	0	0	1
20:00-20:59	0	2	2	1	4	2	1	12
21:00-21:59	2	0	0	1	1	0	0	4
22:00-22:59	0	1	0	0	0	1	0	2
23:00-23:59	0	0	1	0	0	0	0	1
Total	14	15	8	4	16	12	3	72

Citywide 2010 Statistics



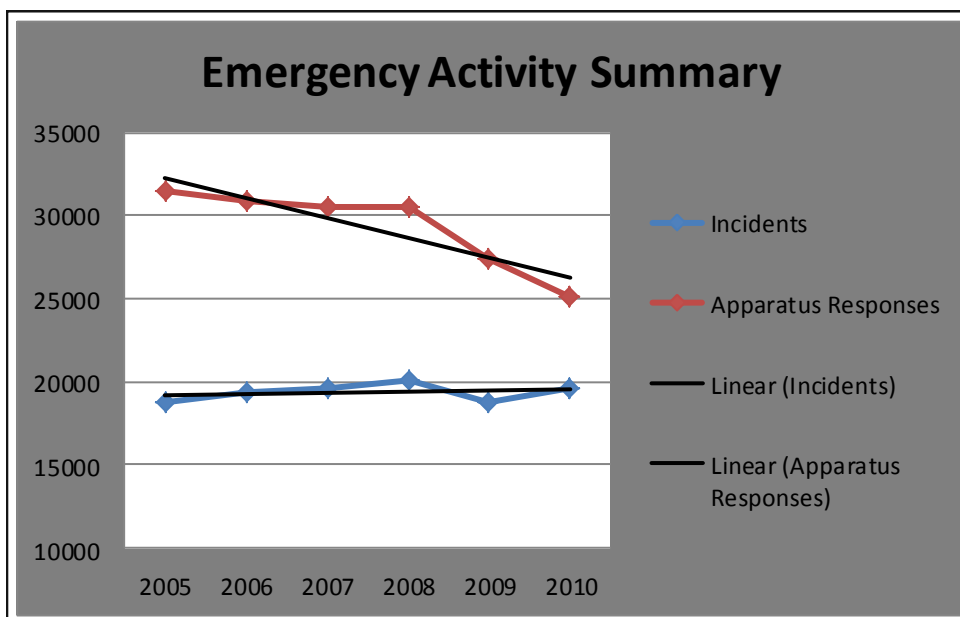
Incidents	EMS	Other	Fire	Total
2005	12682	5153	959	18794
2006	13425	5119	857	19401
2007	13328	5445	869	19642
2008	13864	5457	736	20057
2009	12649	5384	676	18709
2010	12601	6344	689	19634

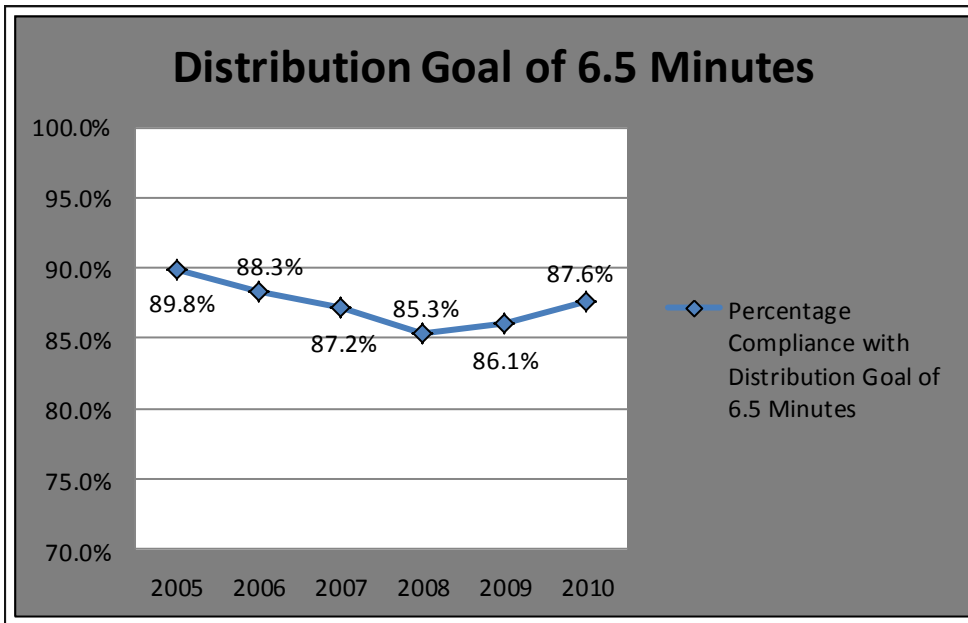




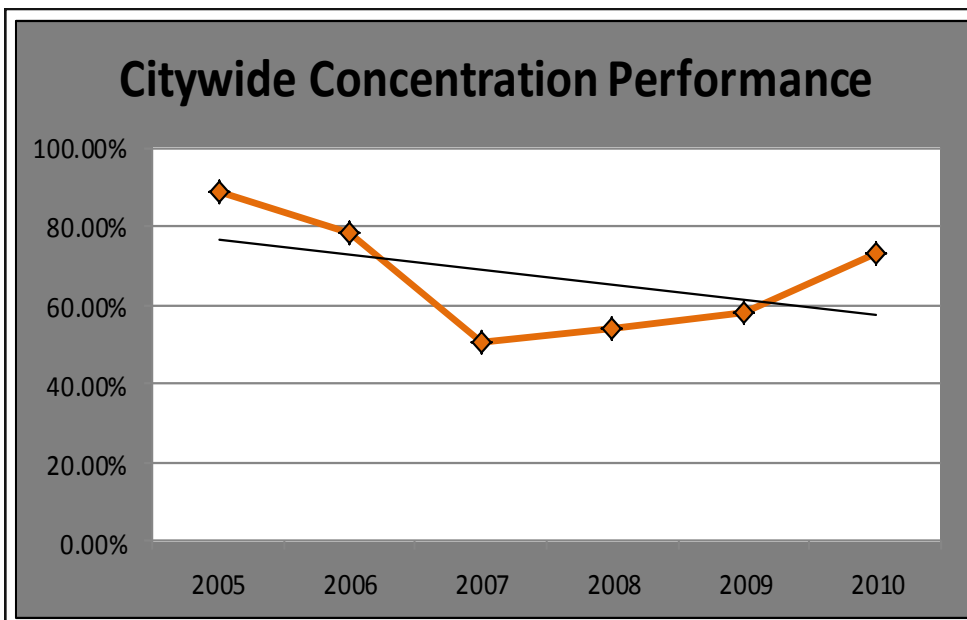
	Emergency Activity Summary	
	Incidents	Apparatus Responses
2005	18794	31476
2006	19401	30825
2007	19642	30459
2008	20057	30467
2009	18709	27366
2010	19634	25090

Apparatus responses are down from 2008 by 17.7% and from 2009 by 8.4%. This is due to an operational change on the way we respond to fire alarms which sends one unit if certain criteria are met.





Station	2005	2006	2007	2008	2009	2010
Bridge	93.6%	91.1%	89.8%	87.9%	88.7%	89.0%
Burton	87.0%	82.7%	84.6%	77.8%	82.2%	81.6%
Chester	91.5%	92.8%	91.8%	89.5%	89.3%	88.7%
Covell	88.7%	84.8%	87.6%	85.4%	86.8%	89.4%
Division	90.9%	90.7%	87.7%	87.9%	88.2%	90.6%
Franklin	91.4%	90.3%	88.7%	89.8%	85.9%	88.3%
Kalamazoo	79.6%	80.5%	75.9%	75.7%	75.1%	76.9%
LaGrave	94.2%	92.1%	93.6%	91.7%	94.4%	94.4%
Leonard	90.0%	86.1%	84.4%	81.7%	84.2%	83.0%
Monroe	90.9%	89.9%	87.5%	86.3%	86.2%	89.5%
Plainfield	90.5%	90.7%	87.7%	85.0%	85.7%	85.5%
Average	89.8%	88.3%	87.2%	85.3%	86.1%	87.6%



Citywide concentration has improved dramatically from 2007 due to operational deployment changes and most importantly, the approval of a tax increase by our citizens to place a Rescue Engine in service that responds citywide with 4 highly trained personnel. This, coupled with our highly successful grant team has leveled off the decline in performance.

City Wide Simultaneous	
2005	52.32%
2006	51.77%
2007	52.88%
2008	53.74%
2009	50.16%
2010	51.94%

Citywide Simultaneous alarms continues to hover around 50% of the time.

Simultaneous percentage of calls has been updated from previous documents (including 2010 statistical summary) due to reformatting of the districts to better reflect actual responses. The core stations continue to experience the highest volume of simultaneous alarms.

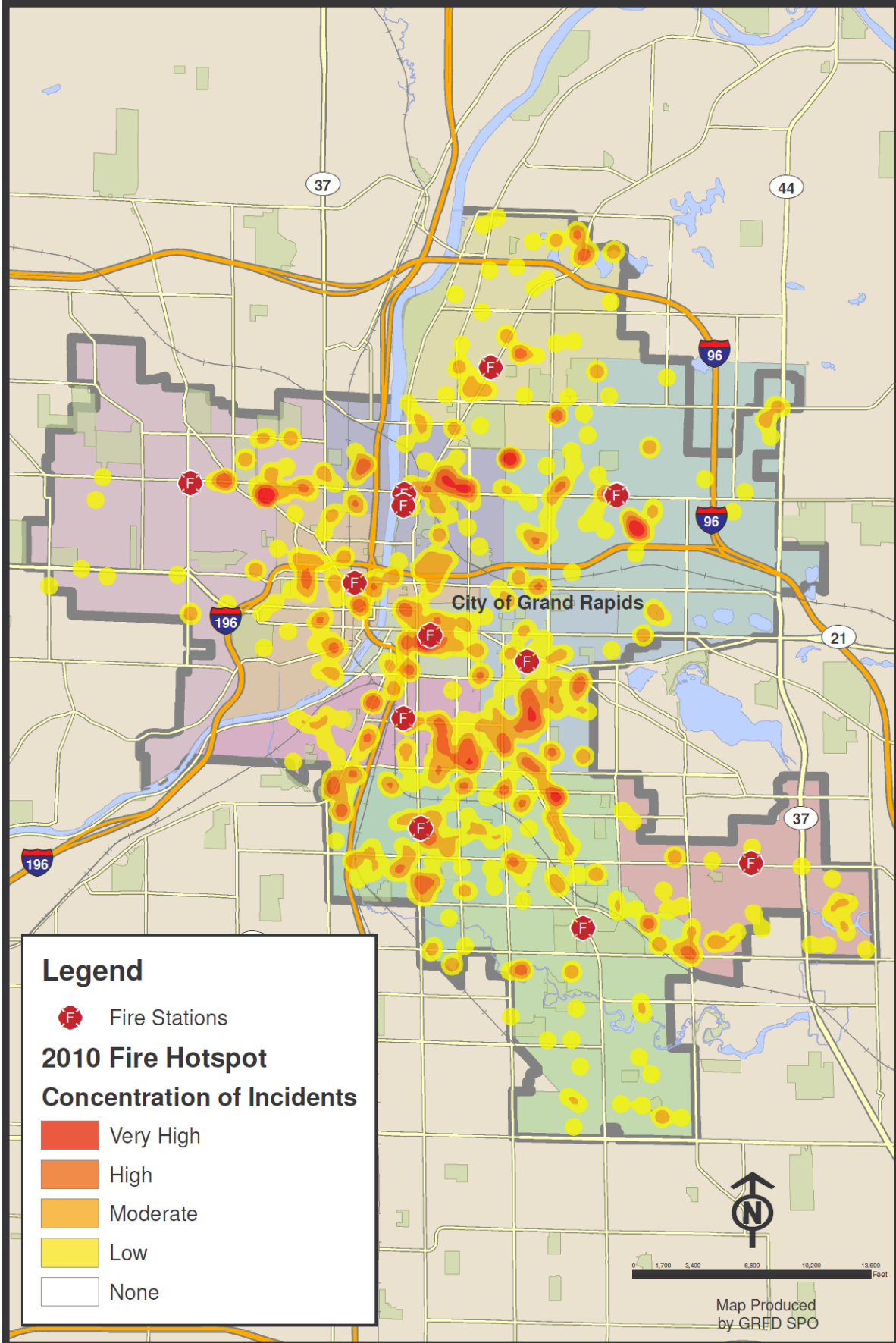
Simultaneous Call Percentage by Station District						
Station	2005	2006	2007	2008	2009	2010
Bridge	7.2%	9.4%	8.4%	8.9%	5.7%	6.9%
Burton	2.8%	2.3%	2.8%	2.7%	2.6%	4.2%
Chester	4.2%	3.9%	2.4%	4.6%	3.8%	5.1%
Covell	4.4%	3.9%	4.0%	2.6%	3.2%	4.3%
Division	6.1%	4.1%	3.7%	4.1%	3.7%	6.1%
Franklin	10.3%	6.9%	8.3%	10.1%	5.4%	7.6%
Kalamazoo	6.5%	9.4%	8.4%	8.1%	7.4%	8.8%
LaGrave	5.2%	5.2%	5.4%	5.6%	5.1%	9.5%
Leonard	5.2%	5.8%	5.4%	2.6%	6.1%	3.8%
Monroe	4.0%	4.9%	5.0%	4.1%	3.3%	3.9%
Plainfield	2.5%	2.5%	1.7%	4.2%	3.1%	2.5%

Reliability						
Station	2005	2006	2007	2008	2009	2010
Bridge	83.4%	90.3%	89.8%	89.8%	89.6%	87.2%
Burton	92.6%	87.5%	91.1%	87.2%	83.3%	87.3%
Chester	83.4%	85.4%	89.9%	85.0%	85.5%	82.7%
Covell	88.8%	87.6%	84.4%	81.3%	87.5%	88.3%
Division	80.4%	83.8%	80.0%	78.5%	89.6%	84.8%
Franklin	87.3%	92.1%	87.9%	88.0%	82.3%	90.6%
Kalamazoo	93.9%	94.6%	89.1%	84.3%	89.8%	91.2%
LaGrave	80.7%	84.1%	90.2%	87.0%	85.8%	90.8%
Leonard	93.3%	91.7%	89.5%	89.0%	90.1%	90.3%
Monroe	89.3%	85.8%	80.5%	75.3%	84.8%	86.4%
Plainfield	93.5%	93.1%	95.1%	90.5%	88.4%	91.6%
Average	87.9%	88.7%	88.0%	85.1%	87.0%	88.3%

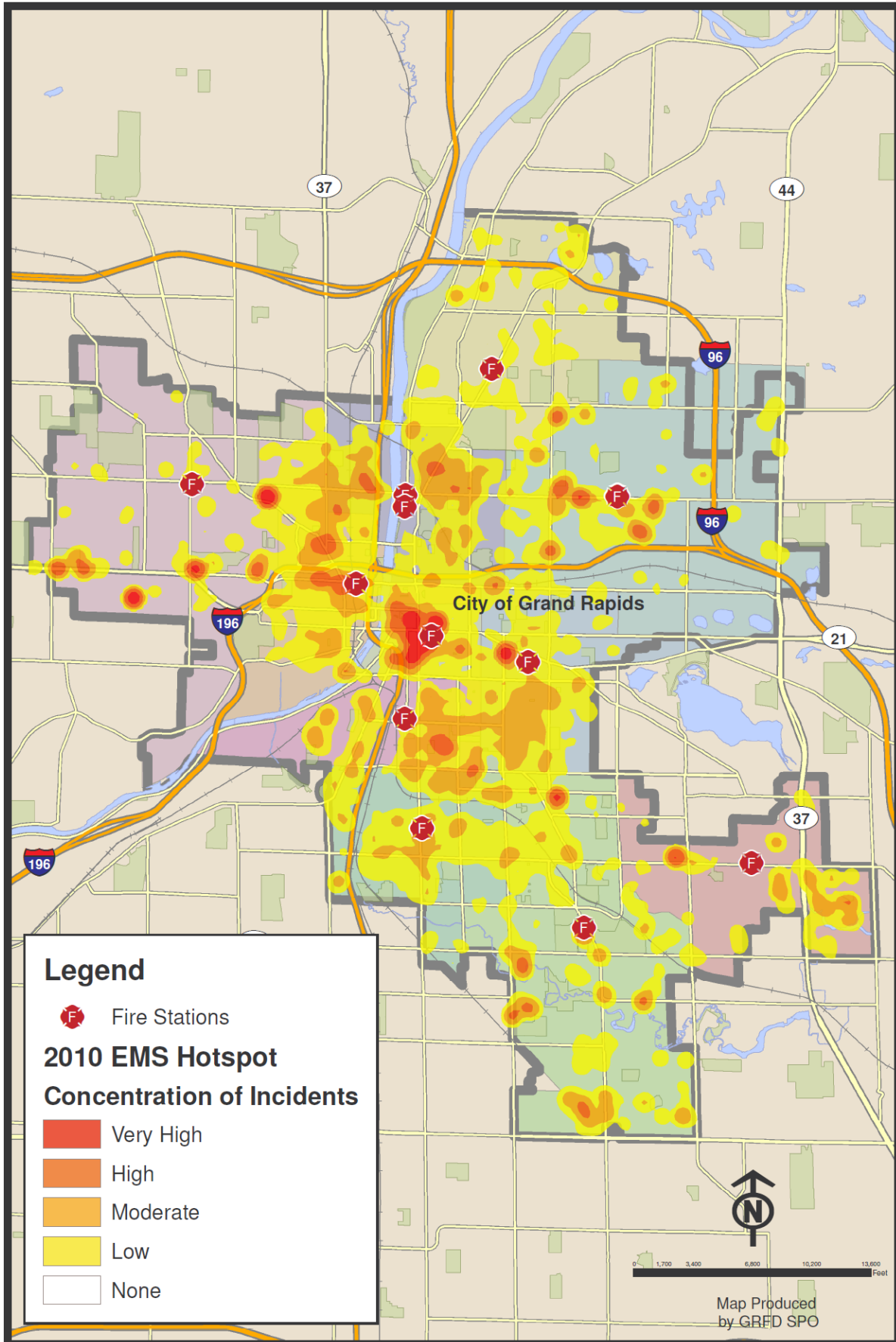
Temporal Activity- 2010 All Calls								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	107	83	109	82	106	126	105	718
01:00-01:59	103	97	76	67	81	113	145	682
02:00-02:59	80	85	83	61	90	125	137	661
03:00-03:59	78	64	47	66	76	100	107	538
04:00-04:59	47	52	44	63	71	73	79	429
05:00-05:59	46	51	55	67	49	65	58	391
06:00-06:59	73	78	60	79	65	51	70	476
07:00-07:59	104	66	95	85	80	50	56	536
08:00-08:59	105	105	113	128	102	80	73	706
09:00-09:59	115	110	124	156	117	106	86	814
10:00-10:59	146	153	132	138	115	98	102	884
11:00-11:59	138	166	140	148	165	118	109	984
12:00-12:59	152	139	161	160	158	130	113	1,013
13:00-13:59	144	137	136	147	183	111	116	974
14:00-14:59	159	154	160	164	153	146	129	1,065
15:00-15:59	148	148	155	147	191	138	121	1,048
16:00-16:59	143	167	183	171	149	132	117	1,062
17:00-17:59	138	151	160	154	180	152	141	1,076
18:00-18:59	144	136	169	162	174	136	134	1,055
19:00-19:59	121	129	135	113	147	139	136	920
20:00-20:59	141	131	135	115	160	132	150	964
21:00-21:59	133	155	154	110	147	136	112	947
22:00-22:59	110	154	133	135	139	116	137	924
23:00-23:59	87	126	93	104	143	134	80	767
Total	2,762	2,837	2,852	2,822	3,041	2,707	2,613	19,634

Temporal Activity -2010 All Fires								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	8	3	3	8	2	3	2	29
01:00-01:59	8	4	7	1	2	8	1	31
02:00-02:59	6	11	1	3	3	4	4	32
03:00-03:59	4	4	1	2	8	3	4	26
04:00-04:59	4	2	1	2	3	3	1	16
05:00-05:59	2	2	1	1	3	0	0	9
06:00-06:59	4	4	1	3	1	1	3	17
07:00-07:59	3	2	3	2	1	4	1	16
08:00-08:59	3	1	2	5	2	4	1	18
09:00-09:59	4	5	3	3	1	2	2	20
10:00-10:59	3	1	2	4	3	5	2	20
11:00-11:59	6	5	4	3	4	3	3	28
12:00-12:59	5	8	5	4	4	5	3	34
13:00-13:59	2	4	3	5	5	3	3	25
14:00-14:59	3	8	4	7	10	7	5	44
15:00-15:59	9	3	5	3	13	8	0	41
16:00-16:59	6	10	5	4	8	7	5	45
17:00-17:59	2	2	7	4	5	6	4	30
18:00-18:59	9	5	7	2	8	5	4	40
19:00-19:59	5	6	5	4	2	4	4	30
20:00-20:59	5	7	4	5	12	8	12	53
21:00-21:59	6	1	3	10	3	1	8	32
22:00-22:59	5	7	3	4	5	4	4	32
23:00-23:59	3	5	4	2	0	4	3	21
Total	115	110	84	91	108	102	79	689

2010 All Fires Hot Spot Density Map



2010 EMS Hot Spot Density Map



Honoring the Past
Transforming our Future

Thank you for your continued interest in the Grand Rapids Fire Department

For further information, please visit www.grcity.us/fire